

COLD FUSION ARCHIVES AT THE UNIVERSITY OF UTAH

*A PROJECT OF THE LENR RESEARCH
DOCUMENTATION INITIATIVE*

Draft Report

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Preface

Cold fusion has the potential to meet a substantial portion of the world's energy needs. Although it was rejected by mainstream science within a year or so after it was announced in 1989, it has continued to be pursued by many highly qualified scientists worldwide. Many of them began their investigations in the exciting months and years after 1989. As a pariah science, cold fusion has attracted relatively few new researchers in the more than 30 years since the announcement.

The LENR Research Documentation Initiative (LRDI) is underway at LENRGY, LLC to capture the records of these pioneering researchers while the material is still available. This objective is being supported with this project to document the cold fusion records of the University of Utah.

Thanks go in particular to David Nagel, not only for his invaluable assistance with this University of Utah project, but also for his long-term support of the LRDI. Marianne Macy was very helpful via emails during the visit to the University campus. She and her late husband, Michael Melich, were responsible for setting up many, if not most, of the files reviewed for this project.

Gratitude is also expressed to the Anthropocene Institute for financial support for this project. The staff at the University – Liz Carpenter, Betsey Welland and David Buford – were extremely helpful and very cordial.

Summary

Cold fusion originated at the University of Utah, when Fleischmann and Pons announced it at a press conference on March 23, 1989. A project is being performed to document the cold fusion files that are still available at the University. It is being undertaken in the LENR Research Documentation Initiative (LRDI), whose overall objective is to capture cold fusion research records while they are still available. The LRDI is a program at the firm LENRGY, LLC.

The project began with careful review of the website of the University's Marriott Library, along with download of relevant materials. A trip was made in August 2021 to review the University holdings. Substantial cold fusion records were found for several organizations and individuals. They comprise more than 530 boxes of materials. Records of the work of Fleischmann and Pons, such as lab notebooks or other information on experiments, were not found for this project.

Particular emphasis during the site visit was placed on three sets of records: 1) the National Cold Fusion Institute (NCFI); 2) FEAT (Future Energy Applied Technology) and ENECO, and 3) Bruce Lewenstein ("Cold Fusion Collection"). The NCFI files are in the University archives, and the information on the other two is in the Marriott Library Collections. As the files were reviewed, a significant portion of them was also scanned. Additional records are available for individual contributors, including Beaudette, Bockris, Chubb (Talbot), Hibbard, Jones and Melich, but were not reviewed for this project.

Despite the relatively short life of the NCFI, from August 1989 to June 1991, its records are substantial and comprise 15 boxes of materials, all of which were reviewed. The FEAT/ENECO files are large, making up half of the University's 530 cold fusion file boxes. Two of the nine categories of records – Research and Personnel – were selected for review. An item of particular significance in the Lewenstein ("Cold Fusion Collection") archive is an April 1995 Briefing Book prepared for a cold fusion presentation to the US Congress.

Future opportunities include individual in-depth projects for each set of files located and a more thorough search for additional cold fusion records at the University. The records reviewed so far, and particularly the files for individuals that could not be reviewed during the visit, form the foundation of additional projects within – and outside – the scope of the LRDI. LRDI participants may be encouraged to contribute their files to the Marriott Library Collections in the future.

1 Introduction

The University of Utah is the birthplace of cold fusion. March 23, 1989 may be considered its birthdate. The University is also the main location of cold fusion's conception and prenatal development – for at least five years before its birth at a press conference. Stanley Pons, chairman of the University's Chemistry Department, received his Ph.D. at the University of Southampton in England. There he met and became friends with Martin Fleischmann, who was on the faculty (but was not Pons' supervising professor). The friendship resulted in visits by Fleischmann to the University after he retired. It was during these visits that Fleischmann and Pons developed their cold fusion ideas and begin tested them with experiments.

Substantial records exist at the University of Utah of the activities and events before and after the 1989 announcement. A trip was made to the University in August 2021, to review, describe and document these records. The purpose of this report is to provide the results of the review.

Research records of Fleischmann and Pons, such as lab notebooks or other information on experiments, were not found for this project.

The three most prominent collections at the University – for the National Cold Fusion Institute (NCFI), the Future Energy Applied Technology (FEAT) company and its successor (ENECO), and the Cold Fusion Collection (Lewenstein Materials) – are reviewed in some detail. The remaining collections, for individual contributors, are noted with descriptions that are currently available online at the University's library website. Methods used are described, and additional potential work (future opportunities) is delineated.

Appendices are included for the press release for the press conference and of the records for the NCFI and FEAT/ENECO..

2 Overview of the University of Utah Cold Fusion Archives

Preparation for the visit to the University of Utah included work on the Marriott Library website and phone calls and email exchanges with staff in the collections department. The website has excellent research and download capabilities, which were utilized for two terms – “cold fusion” and “LENR”. The results of the website search¹ are shown in Table 2-1.

Table 2-1

Cold Fusion Records at the University of Utah

<u>Collection Name</u>	<u>Accession No</u>	<u>Feet/Boxes</u>
National Cold Fusion Institute Records, 1987-1992	Acc0529	7/15
Charles G. Beaudette Papers, 1933-2006	Accn297	19.5/42
Craig Hibberd Collection on Cold Fusion	Accn1309	0.5/1
Cold Fusion Collection, 1987-1992	Accn1319	1.5/3
Steven E. Jones Papers, 1983-1992	Accn1359	1.5/3
Michael Melich Papers, 1912-2012	Accn2016	30.75/70
ENECO Records, 1912-2008	Accn2464	120/263
Talbot A. Chubb Papers, 1930-2011	Accn2559	46.5/97
John O'M. Bockris Papers, 1923-2013	Accn2732	18/35

The total number of boxes in all of the collections is about 530. The full set of the descriptions comprises more than 250 pages.

The records are at two locations on campus, the Marriott Library and the University Archives². The files are professionally managed at both. Photos of the locations are in Figure 2-1. The rooms for reviewing files are shown in Figure 2-2. The types of boxes containing the files are shown in Figure 2-3.

No files were found at either location for the cold fusion research by Martin Fleischmann and Stan Pons. Such files may exist elsewhere at the University but were not located during this visit.

¹ “Visit to the Marriott Library Archives”. Memo to Dave Nagel from Tom Grimshaw, July 18, 2021.

² Located at 666 Guardsman Way, Salt Lake City, Utah, 84112



Figure 2-1

The Marriott Library (Left) and the University Archives



Figure 2-2

Reviewing Rooms at the Marriott Library and the University Archives



Figure 2-3

File Containers Used at the Marriott Library and the University Archives

The files fall generally into two categories – organizations and individuals. Emphasis was placed mainly on organizations for this project. Three sets of files were selected for review – National Cold Fusion Institute, FEAT/ENECO and the Cold Fusion Collection (Bruce Lewenstein files). They are described in Sections 4, 5 and 6 of this report. The NCFI records, the first item in Table 2-1, is at the University Archives. The others are at the Marriott Library. The first two pages of the downloaded collections descriptions for the NCF and FEAT/ENECO are shown in Figures 2-4 and 2-5 as examples of the information provided and the appearance.

National Cold Fusion Institute records, 1988-1991

Overview of the Collection

Creator	National Cold Fusion Institute
Title	National Cold Fusion Institute records
Dates	1988-1991 (inclusive) 1988 1991
Quantity	7 linear feet
Collection Number	Acc0529
Summary	The National Cold Fusion Institute was established on August 14, 1989 as a non-profit corporation to seek external funding for cold-fusion research and to pursue scientific patents. The Institute closed on June 30, 1991. This collection contains budgets, correspondence, legal contracts, memoranda, minutes, news articles, reports, and patent applications from the Office of Director of the National Cold Fusion Institute.
Repository	University of Utah Libraries, University Archives and Records Management University Archives and Records Management, J. Willard Marriott Library University of Utah 666 Guardsman Way Salt Lake City, UT 84112 Telephone: 801-581-8242 david.buhler@utah.edu
Access Restrictions	Materials must be used on-site; advance notice suggested. Access to parts of this collection may be restricted under provisions of state or federal law.
Languages	English

Historical Note

Shortly after Professors B. Stanley Pons and Martin Fleischmann announced that they had discovered "cold fusion" (a process by which energy can be generated through electrochemical induction of nuclear fusion at room temperature), the Utah State Legislature met in a special session and appropriated \$5,000,000 to establish the National Cold Fusion Institute (NCFI) at the University of Utah as a non-profit corporation to seek external funding for additional research and to pursue scientific patents. During its brief existence, the NCFI was under the direction of Hugo Rossi (August to November 1989), James Brophy (November 1989 to January 1990), and Fritz G. Will (December 1990 to June 1991). Interest in cold fusion research quickly declined when further work brought no conclusive results, and the NCFI closed its doors on June 30, 1991 because state funds had run out and investments from private sources were insufficient for the continuation of operations.

National Cold Fusion Institute records, 1988-1991
<http://archivewest.orbitscascade.org/lark/#04440x23135>

1

Content Description

This collection contains budgets, correspondence, legal contracts, memoranda, minutes, news articles, reports, and patent applications from the Office of Director of the National Cold Fusion Institute. Approximately 1.5 linear feet of the collection comes from the University of Utah Technology Transfer Office.

Use of the Collection

Preferred Citation

Initial Citation: National Cold Fusion Institute records. Acc. 529, Box []. University Archives and Records Management. University of Utah, J. Willard Marriott. Salt Lake City, Utah.

Following Citations: Acc. 529.

Administrative Information

Arrangement

The material in this collection is arranged alphabetically and chronologically thereunder.

Acquisition Information

This material came from records center accessions 91-331 and 92-469.

Processing Note

Processed by David Buhler in 2008.

Related Materials

Acc0483

Detailed Description of the Collection

Arnold, White, and Durkee to Budget

Box1

Container(s)	Description	Dates
Box		

National Cold Fusion Institute records, 1988-1991
<http://archivewest.orbitscascade.org/lark/#04440x23135>

2

Figure 2-4

First Two Pages of Collection Descriptions for the NCFI Records

ENECO records, 1912-2007

Overview of the Collection

Creator	ENECO Corporation
Title	ENECO records
Dates	1912-2007 (inclusive) 1912-2007
Quantity	120 linear feet, (263 Boxes)
Collection Number	ACCN 2464
Summary	The ENECO records (1912-2007) consist of patents, contracts, research, office, and financial documents collected by the company. ENECO (formerly FEAT) was a private company that centered on cold-fusion technology and the commercialization of such technology. The majority of patents registered by ENECO were invented by scientists Stanley Pons and Martin Fleischmann. Technologies engineered by ENECO have had a great impact on the local and international scientific communities.
Repository	University of Utah Libraries, Special Collections Special Collections, J. Willard Marriott Library University of Utah 295 South 1500 East Salt Lake City, UT 84112-0860 Telephone: 801-581-8863 special@library.utah.edu
Access Restrictions	Twenty-four hour advance notice encouraged. Materials must be used on-site. Access to parts of this collection may be restricted under provisions of state or federal law.
Languages	English

Historical Note

ENECO was known for registering cold fusion patent technologies for the University of Utah and the company had claimed that they had produced excess heat from a fusion reaction (1989). Following problems regarding reproducibility, ENECO purchased cold fusion patents from the University registered under their name and scientists Pons and Fleischmann continued their work outside the country. Additionally, ENECO had development interests in the following non-cold fusion technologies: oxygen concentrators, N-type diamond semiconductors, and highly efficient thermo-electric converters. These technologies were developed under their individual subsidiaries (Oxydyne Inc., Semidyne, Inc., and Thermodyne Inc.).

Content Description

The ENECO records consist of patents, contracts, research, office, and financial documents collected by the company. Included patents are registered by ENECO as well as patents registered by outside

ENECO records, 1912-2007
<http://archiveswest.orbiscascade.org/ark:/80444xv11349>

agencies used as research by the company as well. Also included in the research are publications written by ENECO scientists as well as publications that were used by agents of ENECO. Office files include correspondence, conference, and presentation documents. Additionally contained in office materials are documents pertaining to ENECO projects as well as subsidiaries and corporate planning. The majority of documents contained in the collection pertain to operation of the company from the mid 1970s through the 1990s.

Use of the Collection

Restrictions on Use

The library does not claim to control copyright for all materials in the collection. An individual depicted in a reproduction has privacy rights as outlined in Title 45 CFR, part 46 (Protection of Human Subjects). For further information, please review the J. Willard Marriott Library's [Use Agreement and Reproduction Request forms](#).

Preferred Citation

Collection Name, Collection Number, Box Number, Folder Number, Special Collections, J. Willard Marriott Library, The University of Utah.

Administrative Information

Arrangement

The ENECO records begin with patent and research documents followed by office materials. Final documents are the financial records collected by the corporation. Patents registered by ENECO inventors are arranged alphabetically by inventors which are then followed by patents used as research and patent binders. Contracts are organized alphabetically within their sections according to name of the individual or organization. Research is also organized alphabetically within sections. Office files begin with personnel documents that are organized alphabetically by the last names of the ENECO employee and are followed by subsidiary documents and general office files. Financial documents begin with shareholder and stock material that is alphabetically organized and is followed by chronologically organized budget, accounting, and expense material and alphabetically organized expense, invoice, and purchase order documents. Final financial documents pertain to subsidiaries and main organizations outside of ENECO. Finally, general documents are arranged alphabetically.

Acquisition Information

These records were purchased from the United States Bankruptcy Court in 2009.

Processing Note

Processed by Betsey Welland, Chelsea Olsen, and Esabelle Khaosanga in 2016.

Separated Materials

Photographs were transferred to the Multimedia Division of Special Collections.

ENECO records, 1912-2007
<http://archiveswest.orbiscascade.org/ark:/80444xv11349>

Figure 2-5

First Two Pages of Collection Descriptions for the FEAT/ENECO Records

3 National Cold Fusion Institute

The National Cold Fusion Institute (NCFI) was established at the University of Utah with funding from the Utah Legislature. The organization is characterized as shown below in the downloaded description of the file collection:

The National Cold Fusion Institute was established on August 14, 1989 as a non-profit corporation to seek external funding for cold- fusion research and to pursue scientific patents. The Institute closed on June 30, 1991. This collection contains budgets, correspondence, legal contracts, memoranda, minutes, news articles, reports, and patent applications from the Office of Director of the National Cold Fusion Institute.

Shortly after Professors B. Stanley Pons and Martin Fleischmann announced that they had discovered “cold fusion” (a process by which energy can be generated through electrochemical inducement of nuclear fusion at room temperature), the Utah State Legislature met in a special session and appropriated \$5,000,000 to establish the National Cold Fusion Institute (NCFI) at the University of Utah as a non-profit corporation to seek external funding for additional research and to pursue scientific patents. During its brief existence, the NCFI was under the direction of Hugo Rossi (August to November 1989), James Brophy (November 1989 to January 1990), and Fritz G. Will (December 1990 to June 1991). Interest in cold fusion research quickly declined when further work brought no conclusive results, and the NCFI closed its doors on June 30, 1991 because state funds had run out and investments from private sources were insufficient for the continuation of operations.

The purpose, organization and other characteristics of the NCFI were set forth in a document found in the files entitled “Establishment of the National Cold Fusion Institute (Figure 3-1).

After leadership by internal University managers, a leader from outside, Fritz Will (Figure 3-2) was brought in as Director. His credentials are summarized in McKubre’s ICCF history document³ as shown below:

Fritz Will is a famous electrochemist who had been employed by General Electric at their corporate central research laboratory in Schenectady, New York from 1960 until 1990 when he took on leadership of the NCFI. The electrochemistry community in 1990 regarded Fritz as thorough and reliable, and about that time he was appointed to be President of the Electrochemical Society, the principal electrochemical society in the U.S., and perhaps the world. It was an interesting and significant choice to see him selected as the director of NCFI, for him to leave GE, and take a senior role in this emerging and turbulent field.

³ McKubre, M., 2015. A Brief History and Introduction to the International Conference Series: A Six-Part History of the ICCF Conferences. Presentation on the Website of ICCF-19, Padua, Italy. Available: <https://www.lenr-canr.org/acrobat/McKubreMCHabriefhist.pdf>.

Establishment of the
NATIONAL COLD FUSION INSTITUTE
 by the
 University of Utah

PURPOSE

The purpose of the National Cold Fusion Institute is to carry out research and development on electrochemically induced cold fusion in order to establish the range of practical application of this new discovery. The Institute is structured to attract corporate participation and to be positioned to accept federal funding when this becomes available. Successful development of the Institute can assure that Utah remains a major contributor to the science, engineering, and commercialization of cold fusion.

ORGANIZATION

The National Cold Fusion Institute is a separate, nonprofit, 501c(3) corporation headed by a full time director. The Board of Directors is composed of two members from the University, one faculty member, and several industrialists. The President of the University appoints all Board members and is Vice-chairman of the Board. The Chairman is elected by the Board from among the industrial members. This structure is designed to be attractive to corporate participants.

The Institute is organized into a Basic Research Division and an Applied Research Division. Research teams are active in four areas: Electrochemistry, Metallurgy, Physics, and Engineering. Faculty members are free to pursue individual research grants at the University, regardless of whether or not they are affiliated with the Institute.

STAFFING

The initial technical staff is composed of University of Utah faculty members supplemented by interested faculty from Utah State University and Brigham Young University and visiting researchers from other universities and industrial laboratories. A permanent staff is to be developed as rapidly as funding levels and the recruiting process permits.

FACILITIES

The NCFI is located in a rented research building at 390 Wakara Way at the University of Utah Research Park. The location makes the Institute separate from the University, yet provides for close cooperation between Institute staff and University faculty.

FUNDING

The state appropriation is to be used as seed funding to initiate a significant research effort quickly. Corporate participants are expected to provide additional support and eventually funding from the Department of Energy is anticipated. No financial support from the University is contemplated.

IMPACT

As a separate corporation, the NCFI operates much as does the University of Utah Research Institute. No organizational changes in the University are involved. If the promises of commercialization are achieved, the University stands to benefit from licensing of its patent pool and the state should experience major economic development.

NOTIFICATION

This notification is made pursuant to Utah Code 53B-17-504, which states in part, “The University of Utah has the following powers:...to form nonprofit corporations or foundations...” and in recognition of Utah Code 53B-16-102, which states,...’The board (e.g., of Regents) shall establish procedures and policies for considering institutional proposals for substantial alterations in the scope of existing institutional operations...”.

Figure 3-1

NCFI Characterization When It Was Established



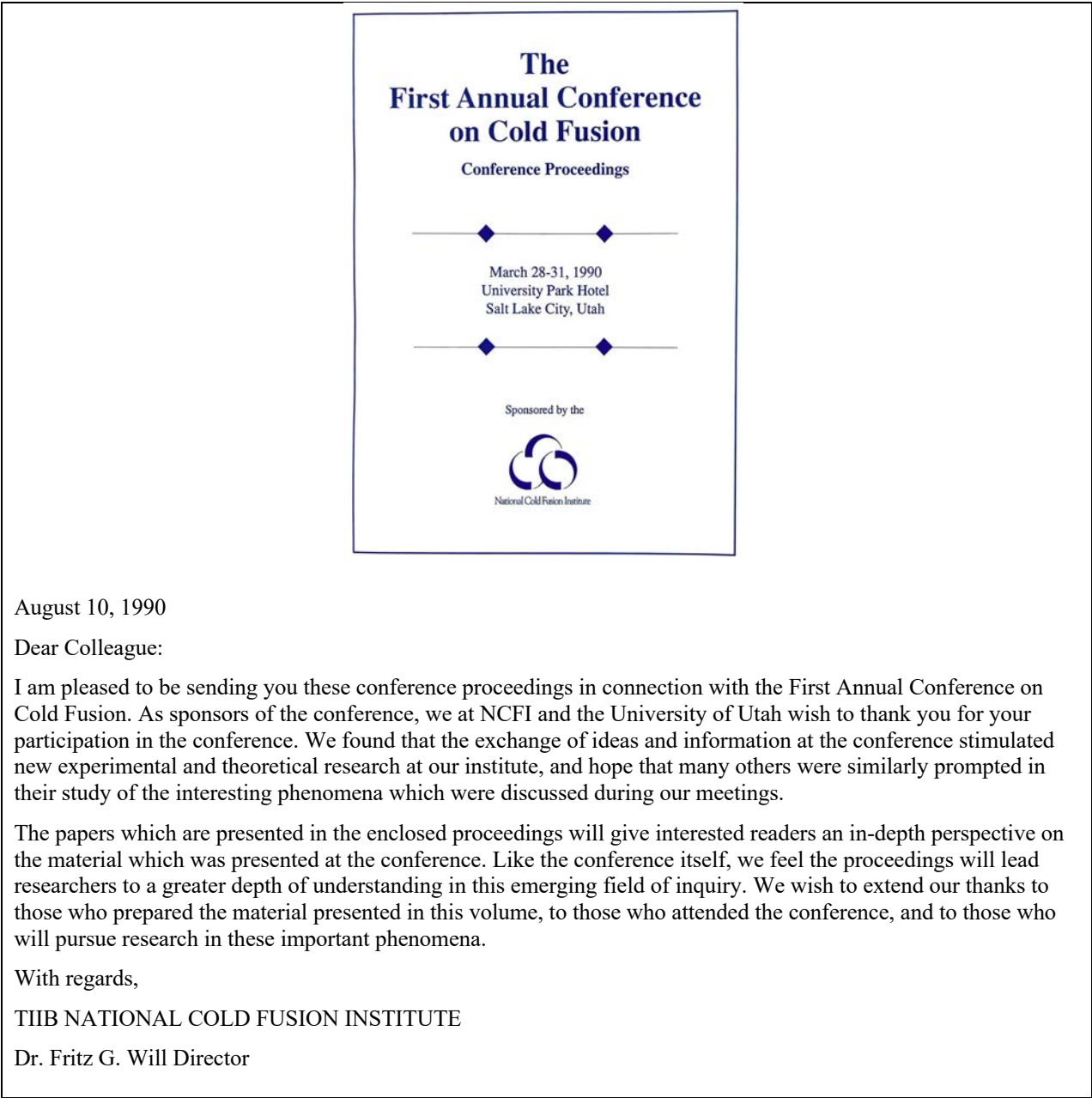
Figure 3-2⁴

Fritz Will, NCFI Director

The NCFI hosted the First International Conference on Cold Fusion (ICCF-1) in March 1990, just a year after the March 23 announcement. The Proceedings were issued the following August. The cover is shown with the letter of transmittal by Fritz Will in Figure 3-3.

The primary emphasis on securing patents was carried over to FEAT after the NCFI closed its doors.

⁴McKubre, M., 2015. A Brief History and Introduction to the International Conference Series: A Six-Part History of the ICCF Conferences. Presentation on the Website of ICCF-19, Padua, Italy.



August 10, 1990

Dear Colleague:

I am pleased to be sending you these conference proceedings in connection with the First Annual Conference on Cold Fusion. As sponsors of the conference, we at NCFI and the University of Utah wish to thank you for your participation in the conference. We found that the exchange of ideas and information at the conference stimulated new experimental and theoretical research at our institute, and hope that many others were similarly prompted in their study of the interesting phenomena which were discussed during our meetings.

The papers which are presented in the enclosed proceedings will give interested readers an in-depth perspective on the material which was presented at the conference. Like the conference itself, we feel the proceedings will lead researchers to a greater depth of understanding in this emerging field of inquiry. We wish to extend our thanks to those who prepared the material presented in this volume, to those who attended the conference, and to those who will pursue research in these important phenomena.

With regards,

TIIB NATIONAL COLD FUSION INSTITUTE

Dr. Fritz G. Will Director

Figure 3-3

Proceedings Cover with Transmittal Letter by Fritz Will⁵

⁵ National Cold Fusion Institute Records, 1988-1991, Collection #Acc 0529, Box #4, Special Collections, J. Willard Marriott Library, The University of Utah.

The NCFI Collection⁶ consists of 15 boxes (Figure 4-4) that are located at the University Archives. The full contents are listed in Appendix D.



Figure 3-4

NCFI Collection at the University Archives

All of the boxes were reviewed, and selected contents were scanned (Table 3-1).

⁶ National Cold Fusion Institute Records, Acc. 529, 15 Boxes. University Archives and Records Management. University of Utah, J. Willard Marriott Library. Salt Lake City, Utah.

Table 3-1

Items in the NCFI Files Selected for Scanning

Box	Scanned Items
1	Letters from Arnold, White & Durkee, May 1989 Articles of Incorporation of the National Cold Fusion Institute, August 1989 Proposal: The Behavior of Electro Chemically Compressed Hydrogen and Deuterium, Pons and Fleischmann, Undated State of the Labs, Briefing Report, December 27, 1989
2	Bylaws of the National Cold Fusion Institute, Salt Lake City, Utah, Undated Establishment of the National Cold Fusion Institute by the University of Utah, Undated University of Utah Press Release: Simple Experiment Results in Infusion at Room Temperature for the First Time. Breakthrough Process Has Potential to Provide Inexhaustible Source of Energy, March 23, 1989 Calorimetric Measurements of the Pd/D system: Fact and Fiction, Pons and Fleischmann, March 27, 1990 Request for Proposals, National Cold Fusion Institute, September 20, 1989 Cold Fusion Prospectus, Introduction and Overview, April 25, 1989? The National Cold Fusion Institute at the University of Utah, a Prospectus, August 31, (1989?)
3	Summary of NSF/EPRI Meeting on Anomalous Effects in Hydrolysis of Deuterated Metals, October 16-18, 1989 NSF/EPRI Meeting, Update, October 24, 1989 NSF/EPRI Meeting, Update, October 24, 1989 (Second Version) Anomalous Nuclear Effects in Deuterium/Solid Systems, An International Progress Review, Sponsored by the Electric Power Research Institute, US Department of Energy and Brigham Young University, 22-24 October 1990, Provo, Utah
4	ICCF-1 Conference Proceedings, Cover Only, with Letter from Fritz Will
5	National Cold Fusion Institute, I CCFN 1, Conference Materials National Cold Fusion Institute, Investigation of Cold Fusion Phenomenon in Deuterated Metals, Final Report, Volume I, II, and III, Covers Only
6	Summary of Two Special Meetings on Cold Fusion: 1) American Physical Society, May 1-2, 1989, Baltimore, MD; 2) Electrochemical Society, May 8, 1989, Los Angeles, CA Correspondence between the University of Utah and Johnson Matthey, Letters and Secrecy Agreements, 1989
8	Science Advisory Committee, University of Utah Research Coordinating Committee, Members, September 1989 News and Public Relations Guidelines, National Cold Fusion Institute, Undated
9a	Biography of Fritz G. Will Poster for Second Annual Conference on Cold Fusion, June 29 – July 4, 1991, Como, Italy
9b	II Annual Conference on Cold Fusion (ACCF2), June 29 – July 4, 1991, Como Italy, Conference Materials, Undated
10	Report of the Cold Fusion Panel, November 1989, a Report of the Energy Research Advisory Board, November 26, 1989 Correspondence with the US Department of Energy
13	(First Pages Only): Scientific Program, National Cold Fusion Institute, September 15, 1989 National Cold Fusion Institute, Quarterly Report, October 5, 1989 National Cold Fusion Institute, Second Quarterly Report, October 15, 1989 to January 15, 1990 National Cold Fusion Institute, Third Quarterly Report, January 1 – March 31, 1990 National Cold Fusion Institute, Fourth Quarterly Report, April 1 and June 30, 1990 National Cold Fusion Institute, Confidential First Quarterly Report, Fiscal Year 1991, July 1 – September 30, 1990 National Cold Fusion Institute, First Quarterly Report, Fiscal Year 1991, July 1-September 30, 1990 National Cold Fusion Institute, Second Quarterly Report, Fiscal Year 1991, October 1 – December 31, 1990 National Cold Fusion Institute, Third Quarterly Report, Fiscal Year 1991, January 1 – March 31, 1991 News Release, the National Cold Fusion Institute's Response to the Review Panel's Report, Dr. Fritz G. Will, director, NCFI, January 8, 1991 News Release, Scientific Panel Says Experiments Fail to Prove Cold Fusion, but Lauds Leadership, Focus of Work at Utah's Fusion Institute, Undated. Memorandum, Report of the External Review Panel, Dr. Fritz Will, January 16, 1991
14	Program Overview, Fritz G. Will, October 11, 1990, National Cold Fusion Institute Memorandum, Fritz G. Will, Visit by Doctors Karen Morris and Wilford Hansen, 12 October 1990
15	Visitor Register

4 Future Energy Applied Technology (FEAT) and ENECO

When the NCFI closed its doors in June 1991, efforts to secure cold fusion patents did not end. A commercial organization, Future Energy Applied Technology (FEAT), acquired the patent rights from the University of Utah and continued the pursuit of approval by the US Patent and Trade Office (PTO). The former NCFI Director, Fritz Will, apparently joined FEAT for a period of time.

In support of securing cold fusion patents, a laboratory was operated to conduct research and verify the phenomenon to the PTO. At some point, the FEAT organization evolved into ENECO. A summary description of the company is provided by the Marriott Library description of its ENECO Files as shown below.

Summary: The ENECO records (1912-2007) consist of patents, contracts, research, office, and financial documents collected by the company. ENECO (formerly FEAT) was a private company that centered on cold-fusion technology and the commercialization of such technology. The majority of patents registered by ENECO were invented by scientists Stanley Pons and Martin Fleischmann. Technologies engineered by ENECO have had a great impact on the local and international scientific communities.

Historical Note: ENECO was known for registering cold fusion patent technologies for the University of Utah and the company had claimed that they had produced excess heat from a fusion reaction (1989). Following problems regarding reproducibility, ENECO purchased cold fusion patents from the University registered under their name and scientists Pons and Fleischmann continued their work outside the country. Additionally, ENECO had development interests in the following non-cold fusion technologies: oxygen concentrators, N-type diamond semiconductors, and highly efficient thermo-electric converters. These technologies were developed under their individual subsidiaries (Oxydyne Inc., Semidyne, Inc., and Thermodyne Inc.).

ENECO's emphasis on LENR patents is clearly stated in the company's trifold brochure (Figure 4-1). The text of the brochure (Figure 4-2) clearly shows this emphasis. The company's model for utilizing patents for commercialization was presented in 1995⁷, some four years after the company's inception. The model is summarized in a conceptual flow diagram (Figure 4-3). The breath of ENECO's approach, including eight areas of emphasis, is depicted in Figure 4-4.

⁷ Jaeger, F., 1995. A Model for Commercializing Patents. Fifth International Conference on Cold Fusion (ICCF-5), Monte Carlo, Monaco, April.

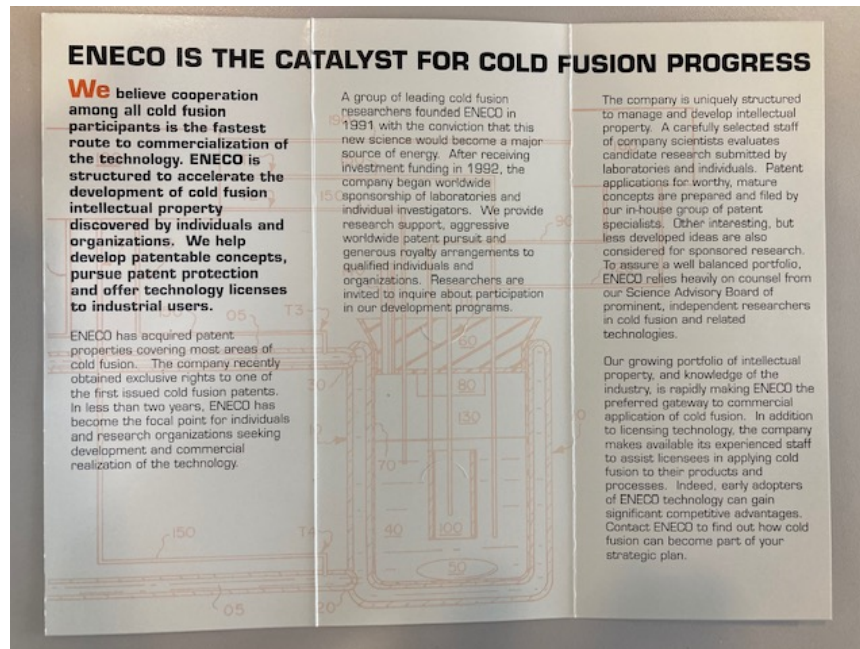
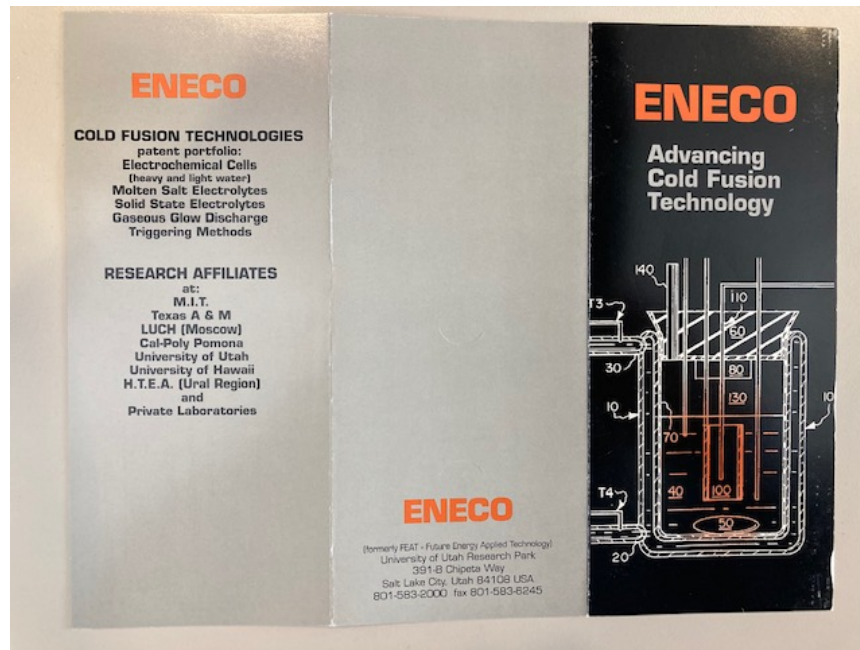


Figure 4-1
ENECO Trifold Brochure

ENECO IS THE CATALYST FOR COLD FUSION PROGRESS

We believe cooperation among all cold fusion participants is the fastest route to commercialization of the technology. ENECO is structured to accelerate the development of cold fusion intellectual property discovered by individuals and organizations. We help develop patentable concepts, pursue patent protection and offer technology licenses to industrial users.

ENECO has acquired patent properties covering most areas of cold fusion. The company recently obtained exclusive rights to one of the first issued cold fusion patents. In less than two years, ENECO has become the focal point for individuals and research organizations seeking development and commercial realization of the technology.

A group of leading cold fusion researchers founded ENECO in 1991 with the conviction that this new science would become a major source of energy. After receiving investment funding in 1992, the company began worldwide sponsorship of laboratories and individual investigators. We provide research support, aggressive worldwide patent pursuit and generous royalty arrangements to qualified individuals and organizations. Researchers are invited to inquire about participation in our development programs.

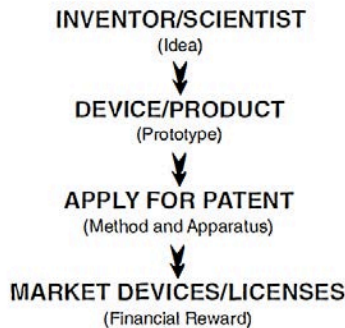
The company is uniquely structured to manage and develop intellectual property. A carefully selected staff of company scientists evaluates candidate research submitted by laboratories and individuals. Patent applications for worthy, mature concepts are prepared and filed by our in-house group of patent specialists. Other interesting, but less developed ideas are also considered for sponsored research. To assure a well balanced portfolio, ENECO relies heavily on counsel from our Science Advisory Board of prominent, independent researchers in cold fusion and related technologies.

Our growing portfolio of intellectual property, and knowledge of the industry, is rapidly making ENECO the preferred getaway to commercial application of cold fusion. In addition to licensing technology, the company makes available its experienced staff to assist licensees in applying cold fusion to their products and processes. Indeed, early adopters of ENECO technology can gain significant competitive advantages. Contact ENECO to find out how cold fusion can become part of your strategic plan.

*Figure 4-2
Text of ENECO Trifold Brochure*

ENECO

A MODEL FOR COMMERCIALIZATION UTILIZING PATENTS



University of Utah Research Park
391-B Chipeta Way • Salt Lake City, Utah • 84108 • Ph (801) 563-2000 • Fx (801) 563-6245

FIG 1

*Figure 4-3
ENECO's Model for Utilizing Patents for Commercialization*

PATENT PORTFOLIO CONCEPT

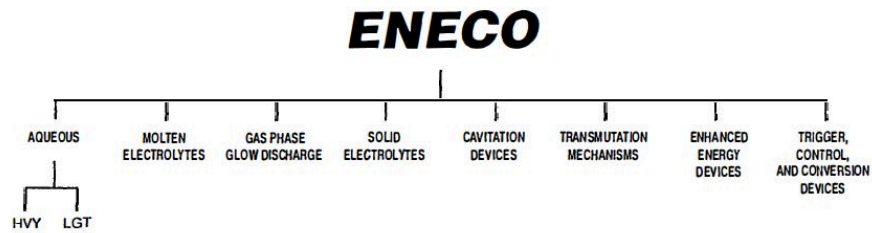


Figure 4-4

ENECO's Patent Portfolio Concept

The primary leaders of ENECO were Fred Jaeger, President, and Yan Kucherov, Director of R&D (Figure 4-5). Most of the organization's funding came from Charlie Becker of San Antonio. Charlie's brother, Leroy Becker, was also involved in ENECO's leadership. Edmund Storms served for a time on the Board of Directors⁸. Peter Hagelstein, Michael Melich and David Nagel served in Technical Advisory Roles.

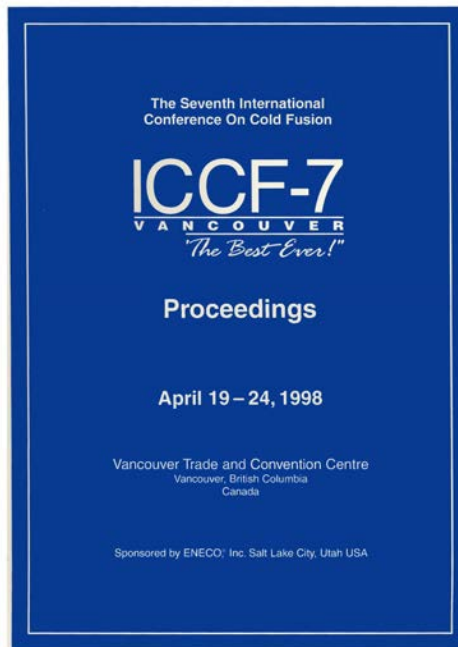


Figure 4-5

⁸ "Transcript of February 10 (2021) Interview on ENECO Experience". Memo to Edmund Storms from Tom Grimshaw, February 11, 2021.

*Fred Jaeger in 1995 at ICCF-5 (on the right in the left panel⁹) and
Yan Kucherov in 1998 at ICCF-7*

In conjunction with its leadership in the LENR Field, ENECO sponsored ICCF-7 in Vancouver, BC in 1998. The cover of the ICCF-7 proceedings, and the statement by Jaeger as conference organizer are shown in Figure 4-6.



THE SPIRIT OF VANCOUVER

I would like to thank everyone who took the time, effort, and money to attend the Seventh International Conference on Cold Fusion in Vancouver on April 19-24, 1998. The substantial preparation and advanced work of all oral and poster presenters, combined with active audience participation, created a spontaneously constructive environment for discussion. I hope all participants returned from Vancouver with a renewed sense of purpose, a deeper insight to guide their research, and new perspectives to broaden their thinking.

The congenial atmosphere at ICCF-7 was a unique and rewarding experience. Perhaps the enlightened spirit was a result of the spectacular Vancouver scenery; or the realization, after nine years, that unity and cooperation among pioneering researchers may be more productive than competition. Over 200 people from 20 countries and all scientific disciplines gathered in Vancouver to share ideas in an attempt to understand the mechanisms responsible for the unequivocal laboratory results many have witnessed firsthand. Across cultural, linguistic and disciplinarian boundaries, scientists from widely divergent backgrounds worked together to pursue a common goal of trying to perfect a potentially new, clean, economical, and abundant energy source for the 21st century.

I believe ICCF-7 marked a crucial milestone of maturation of the field from the viewpoint of science, finance, and human resources that will support and sustain growth for a strong new generation.

⁹ With David Thompson (Left) and Mike Melich. Source: McKubre, M., 2015. A Brief History and Introduction to the International Conference Series: A Six-Part History of the ICCF Conferences. Presentation on the Website of ICCF-19, Padua, Italy. Available: <https://www.lenr-canr.org/acrobat/McKubreMCHabriefhist.pdf>.

The diversity and quality of the data presented at ICCF-7 has grown more compelling. A plethora of new, diverse results from a wide variety of second generation experiments help move the field closer to a better understanding of reaction mechanisms, and virtually eliminate the possibility that early electrochemical experiments were just some transient mistake.

Figure 4-6

Cover of ICCF-7 Proceedings and Associated Statement of Jaeger as Organizing Chairman

Although most research activities are still critically undercapitalized, as evidenced by approximately two-thirds of ICCF-7 participants paying for their own attendance, decentralized self-funded research leads to highly focused lab activities. The self-supported fervor and dedication of current researchers provides a grass-roots resiliency and enthusiasm that can not be easily extinguished by adverse, external events.

Approximately one-third of the ICCF-7 audience was new. Nine students were present, some of whom gave their very first presentation at an ICCF conference. One new student was elected as a “Top Ten” presenter. New and younger persons entering the field provide vital fresh perspectives that are crucial to continuation and growth. An entire second generation of scientists and managers are now carrying on the bulk of the work that was formerly performed by early pioneers.

In closing, I would like to thank the International Advisory Committee for providing the opportunity for me to help organize ICCF-7. It was very satisfying to be able to help contribute to the growth and advancement of this important new field of research.

Until we meet again at ICCF-8 in Italy, best wishes to all and good luck with your pursuits.

Sincerely,

Fred Jaeger

Organizing Chairman

Figure 4-6(Continued)

Statement of Jaeger as Organizing Chairman

Unfortunately, the PTO has routinely rejected cold fusion patents going back to the beginnings of the field – and continues to do so up to the present. Some patents were secured outside the US, but the ENECO was ultimately unsuccessful in persuading the PTO to approve the applications for the Fleischmann and Pons patents obtained from the University of Utah. The patent rights were returned to the University in May 1997, and the patents were eventually abandoned in 1998¹⁰.

After pursuing other technologies, ENECO apparently filed for bankruptcy in about 2008.

The University of Utah collections¹¹ for FEAT and ENECO are large, comprising nearly half (263 boxes) of the total of about 530 boxes of cold fusion materials. The holdings are in the Marriott

¹⁰ Nadis, S., 1998. Utah University Finally Drops Out of Cold-Fusion Patent Chase. Nature, Vol 393, May 7.

¹¹ ENECO Records, 1912-2007, Accn. 2464, 263 Boxes. University Archives and Records Management. University of Utah, J. Willard Marriott Library. Salt Lake City, Utah.

Library Collections, where the files have been archived in nine categories (Table 4-1). Selected boxes (Figure 4-7) from the Collections were requested from storage for review during the onsite visit.

Table 4-1

Categories of ENECO Records at the Marriott Library

Category	Description	Boxes
1	Patents	1-73
2	Contracts	74-83
3	Research	84-100
4	Personnel	101-116
5	Thermodyne Technologies	117-120
6	Oxydyne Corporation	121-123
7	Office Files University of Utah Fusion Resources CETI University of Hawaii Publicity Conferences FEAT General Office	124-161
8	Financial Materials Shareholder & Stock Budget, etc. Expenses, etc. Thermodyne Oxydyne DARPA	162-262
9	General Materials	263



Figure 4-7

ENECO File Boxes Selected for Review

The files requested for review were primarily from Categories 3 and 4 (Research and Personnel). The full contents of these records are presented in Appendix E. During the review, some of the files – those deemed most relevant to the Project – were selected for scanning. The items scanned are listed in Table 4-2.

*Table 4-2
Items Selected for Scanning in the FEAT/ENECO Collection*

Box	Description	Source	Date	Pages Scanned
84-4	Anomalous Effects in Deuterated Systems. NAWCWPNS TP 8302.	Miles, etc.	1996	6
84-7	Cold Fusion: Report on a Recent Amoco Experiment	Amoco	ca 1994	22
84-26	A Model for Cold Fusion Low-Energy Nuclear Changes	Hal Fox	1993	4
85-1	Investigation of Cold Fusion Phenomena in Deuterated Metals, Vol I	NCFI	1991	74
85-2	Investigation of Cold Fusion Phenomena in Deuterated Metals, Vol II	NCFI	1991	10
85-3	Investigation of Cold Fusion Phenomena in Deuterated Metals, Vol III	NCFI	1991	9
86-15	Heat after Death	F&P	ca1994	25
88-7	A New Theory that Unifies the Forces of Nature	Zielinski	Undated	6
88-18	A Reanalysis of Selected Calorimetric Data Obtained at Harwell ... Palladium Cathodes in Light and Heavy Water	F&P	ca 1993	20
88-21	Research of Stimulating Factors for Cold Fusion ... Control of This Process in Power Devices	Zelenski	1994	8
?	ENECO – Advancing Cold Fusion Technology (Trifold Brochure)	ENECO	Undated	3
?	Letterhead, One Page, in Russian	FEAT	Undated	1
84-4	Anomalous Effects in Deuterated Systems. NAWCWPNS TP 8302.	Miles, etc.	1996	6
100	Experimental Device. Pd-Au Alloy Powder. 97wt%Pd-3wt%Au.	ENECO	No Date.	6
108-6	ENECO Memos and Notes	ENECO	1997	9
111	Snow, Christensen & Martineau Letter to Jaeger 1994	To ENECO	1994	1
111-11	Paneth & Peters Translations. Nature Article	To ENECO	1995	50
112	Employee Policy Handbook	ENECO	1993	
112	Correspondence for ENECO to Transmit	Fleischmann	1996	34
124	Announcement for The Sixth International Conference on Cold Fusion, October 13-18 1995	ICCF-6	1995	28
141	ENECO Correspondence and Brochure	ENECO	1993	47
151	Business Cards	At ENECO	Undated	19

5 “Cold Fusion Collecton” (Bruce Lewenstein Material)

Bruce Lewenstein reported extensively on cold fusion developments in the early months and years after the 1989 announcement. His large collection is archived at Cornell University, where he is on the faculty. The Lewenstein records at the Marriott Library¹² consist of three boxes. They are described as follows in the Marriott library file description:

The cold fusion collection (1987-1992) contains articles written by Bruce V. Lewenstein relating to the history and testing of cold fusion clippings from the Utah Chemistry Department relating to the study of cold fusion.

A particularly relevant item in the collection is a “Congressional Briefing Book”, which was prepared in April 1989 for a briefing of the U.S. Congress. The document is in Box 2 of the collection. Its label and table of contents are shown in Figure 5-1.

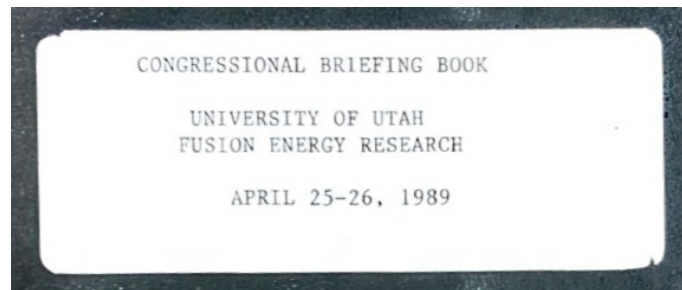


Table of Contents
Tab 1 Itinerary
Tab 2 Legislative Strategy
Tab 3 Talking Points
Tab 4 Congressional Briefing Visits: What to expect, what to do and not do
Tab 5 Dos and Don'ts of Testifying Before Congressional Committees
Tab 6 Testimony
Tab 7 Utah Delegation
Tab 8 House Science, Space, and Technology Committee
Tab 9 Senate Committee on Commerce, Science, and Transportation
Tab 10 House Appropriations Subcommittee on Energy and Water Development
Tab 11 Senate Appropriations Subcommittee on Energy and Water Development
Tab 12 Congressional Schedule
Tab 13 News Article (Economist)

Figure 6-1

Label and Table of Contents of Congressional Briefing Document

¹² Cold Fusion Collection, 1987-1992, Accn. 1319, 3 Boxes. University Archives and Records Management. University of Utah, J. Willard Marriott Library. Salt Lake City, Utah.

Another important item in this collection is a document entitled “Cornell Cold Fusion Archive.”¹³ It includes perhaps the most complete and well-documented chronology of events before and after the press conference in existence. It is dated 1991. A slightly revised version, dated 1994, is on the Cornell University website.

The 1994 version of the Cold Fusion Archive document contains an important analysis of how science is conducted and the relationship between science, politics and the press. The analysis focuses on five major questions, shown below, which are addressed by Lewenstein in the document.

- What role does the press play in modern science? Does the press merely disseminate the results of experimental investigations, or does it become an active player in the scientific process? Was its behavior in the cold fusion saga somehow different than in other scientific episodes? What changes in science communication does cold fusion foretell?
- What is the place of politics in science? Are politicians just players on the outskirts of scientific investigation-or are they integral to modern scientific work? What does politics in science accomplish?
- How important is competition between research teams? Is science fundamentally a search after nature’s truths, or is it a game with winners and losers?
- How do patents affect research? How can a field that puts so much emphasis on priority of discovery deal with instances of double discoveries? How can scientific commitments to open communication be reconciled with intellectual property rights?
- And, perhaps most fundamental, what does it mean for science when experiments are unclear? If modern science depends on the belief that an experiment can yield an answer, how can it deal with ambiguity and incoherence in the research process?

¹³ Cold Fusion Archive, 1989-1993, 2013. Collection Number 4451. Division of Rare and Manuscript Collections. Cornell University Library. Ithaca, New York. <https://rmc.library.cornell.edu/EAD/htmldocs/RMM04451.html>.

6 Archives of Individual Contributors

When the Marriott Library website was searched for “cold fusion” and “LENR”, six entries came up in addition to the three described above. Because of time limitations, these files were not reviewed during the onsite visit. They are presented below (in alphabetical order) with their website descriptions.

6.1 Charles Beaudette

The Charles G. Beaudette papers (1933-2006) consist of Beaudette’s writings and files on cold fusion. Beaudette (b. 1930) is an electrical engineer who graduated from the Massachusetts Institute of Technology in 1952.

Historical Note: Charles G. Beaudette was born in Boston in 1930. He attended the Massachusetts Institute of Technology in Cambridge, Massachusetts, where he majored in electrical engineering and held the position of managing editor of *The Tech*, the official student newspaper. He was awarded the degree of S.B. (Bachelor of Science) in electrical engineering in 1952, after which he entered a two-year tour of duty in the United States Air Force. In 1958 he started Dychro Corporation and sold it to a computer company in 1961. From 1963 to 1973 he was employed by EG&G Corporation in Wellesley, Massachusetts, in the capacity of senior engineer and engineering manager. It was during this time that he participated in the technology development for what eventually became the office facsimile, and which work included development of what is now the PC modem. From this activity, Beaudette was issued patents on image processing for variable speed page scanning.

Charles G. Beaudette Papers, 1933-2006. Accn. 2297, 42 Boxes. Special Collections and Archives. University of Utah, J. Willard Marriott Library. Salt Lake City, Utah.

6.2 John O’M Bockris

The John O’M. Bockris papers (1923-2013) consists of personal papers, research materials and correspondence. Including within the collection are materials regarding the Philadelphia Project and the fraud investigation. Bockris was a professor of physical science.

Historical Note: Bernhardt Patrick John O’Mara Bockris, born 5 January 1923, died 7 July 2013, was a professor in the physical sciences. Among wide ranging contributions to physical chemistry, Bockris is best known for his creation of physical electrochemistry; for the introduction of a hydrogen economy; and for the first known nuclear reactions to be carried out in aqueous solutions.

Dr. Bockris was exonerated of fraud or scientific misconduct by his university after three investigations of his research on cold fusion and transmutation.

John O’M. Bockris Papers, 1923-2013. Accn. 2732, 35 Boxes. Special Collections and Archives. University of Utah, J. Willard Marriott Library. Salt Lake City, Utah.

6.3 Talbot Chubb

The Talbot A. Chubb papers (1930-2011) consist of materials resulting from Chubb’s research interests in cold fusion and the physics field. The collection contains his professional writings, presentation materials, proposals, and conference materials. Also include in the collection are materials regarding several of his colleagues and also subject and organization files. Chubb was an experimental physicist at the Naval Research Laboratory (NRL) in Washington, DC. He also researched the theoretical basis of low energy nuclear fusion and the experimental evidence of cold fusion.

Biographical Note: Talbot was born on November 5, 1923 in Pittsburgh, Pennsylvania, the youngest of three sons. He was a physics graduate of Princeton University in 1944. He received a doctorate in physics from the University of North Carolina in the early 1950s.

During World War II, Talbot worked on uranium isotopes for the Manhattan Project at Oak Ridge, TN, and served in the US Army. For over 30 years, Talbot was an experimental physicist at the Naval Research Laboratory (NRL) in Washington, DC. His research included experiments that examined the earth's upper atmosphere, the sun, and a process for storing energy collected from sunlight, called Solchem. His NRL team were pioneers in X-ray astronomy and discovered early evidence of the existence of neutron stars and black holes. After retiring from NRL, Talbot worked with his nephew, Scott Chubb, Ph.D., on the theoretical basis of low energy nuclear fusion. Recently, his goal was to raise awareness of the experimental evidence of cold fusion and to foster research on this new energy source.

Talbot A. Chubb Papers, 1930-2011. Accn. 2559, 97 Boxes. Special Collections and Archives. University of Utah, J. Willard Marriott Library. Salt Lake City, Utah.

6.4 Craig Hibberd

The Craig Hibberd collection on cold fusion (1989-1992) contains newspaper and magazine articles about cold fusion research conducted by B. Stanley Pons and Martin Fleischman at the University of Utah in 1989.

Historical Note: Craig Hibberd worked for the Western Area Power Administration.

Craig Hibberd Collection on Cold Fusion. Accn. 1309, 1 Box. Special Collections and Archives. University of Utah, J. Willard Marriott Library. Salt Lake City, Utah.

6.5 Steven Jones

The Steven E. Jones papers (1983-1992) consist of materials resulting from Jones' research interests in cold fusion and the physics field in general. Included are correspondence, notes, and writings.

Historical Note: Steven E. Jones was a professor of physics at Brigham Young University.

Steven E. Jones Papers, 1983-1992. Accn. 1359, 3 Boxes. Special Collections and Archives. University of Utah, J. Willard Marriott Library. Salt Lake City, Utah.

6.6 Michael Melich

The Michael Melich papers consists of materials regarding his work as a physicist and professor working with both the Naval Research Laboratory and the Naval Postgraduate School. The collection consists of administrative, research, and lecture materials from his tenure at NPS.

Biographical Note: Michael Edward Melich was born February 22, 1940, in Moab, Utah, to Mitchell and Doris Snyder Melich. He was a dedicated student, and after graduating high school he went on to obtain a B.S. in Physics from Stanford, an M.S. in Experimental Physics from the University of Utah, and an M.A. and Ph.D. in Theoretical Physics from Rice University.

From 1967 to 1985 Dr. Melich worked in the command and control section in the Naval Research Laboratory, heading it from 1976 to 1985. After this, he took an extended leave of absence to work as the chair professor of combat system engineering for the Naval Postgraduate School, where he remained until 2015. While at NPS, he was heavily involved in cold fusion research, having taken interest in the field following the 1989 discovery of the Pons-Fleischmann Effect at the University of Utah.

Following an intense battle with prostate cancer, Michael Melich passed away June 28th, 2019.

Michael Melich Papers, 1912-2012, Accn. 2016, 70 Boxes. Special Collections and Archives. University of Utah, J. Willard Marriott Library. Salt Lake City, Utah.

7 Project Methods

As is customary for the LRDI, the methods used were a blend of previously established practice¹⁴, and procedures specifically for the University of Utah project. The overall LRDI procedure is set forth in an article in Infinite Energy¹⁵.

Initially, the Marriott Library website was accessed, and the descriptions of the cold fusion holdings were downloaded and examined. Contact was made with Library staff, and arrangements were made for the visit. Several days were then spent onsite in Salt Lake City. Photos were taken of the library and archive during the visit. As the files were reviewed, selected items were scanned using an iPhone scanning app. The general schedule of activities was as follows:

- Day 1 Orientation. Marriott Library. Photos. ENECO Review
- Day 2 University Archives. Photos. NCFI Review
- Day 3 Marriott Library. ENECO Review.
- Day 4 Marriot Library. Lewenstein Review. Wrapup

The March 23, 1989 press conference was downloaded from YouTube and transcribed. Screenshots taken of scenes in the video were used to illustrate the two parts of the conference – podium/audience and lab tour. A copy of the press release for the conference was also reviewed. Supplemental materials on the Web were located, downloaded and incorporated. McKubre's history of the ICCF conferences¹⁶ was particularly helpful. The materials from the site visit and other sources have been integrated for this report.

¹⁴ Grimshaw, T.W., 2019. Collection, Organization, and Documentation of LENR Research Results: Guideline. January.

¹⁵ Grimshaw, T., 2020. Documenting Cold Fusion Research: Preserving a Vital Asset for Humankind. Infinite Energy, Issue 150, March/April 2020, p. 9-13.

¹⁶ McKubre, M., 2015. A Brief History and Introduction to the International Conference Series: A Six-Part History of the ICCF Conferences. Presentation on the Website of ICCF-19, Padua, Italy. Available: <https://www.lenr-canr.org/acrobat/McKubreMCHabriefhist.pdf>.

8 *Future Opportunities*

Particularly when (and if) the benefits of cold fusion are realized, the trajectory of the field will become of great interest. The University of Utah records of the origins of the Fleischmann and Pons' claims will become of paramount importance for documenting this trajectory.

The primary objectives of the University of Utah Cold Fusion Documentation Project have been to describe its cold fusion holdings and to lay the foundation for more detailed work in the future. Two possible courses after this Project are to do more in-depth and detailed work with what has been documented and to locate additional records elsewhere in the University organization, including the original work by Fleischmann and Pons before and after the March 23 announcement, which was not found in this project.

Certainly, individual comprehensive projects could be accomplished for the NCFI and FEAT/ENECO LENR efforts. Files that were identified in this Project but not included in the scope of review could be documented, particularly the files of prominent individuals in the cold fusion field. The University archives could be carefully searched for relevant files for additional major figures at the organization and in the right timeframe, such as Peterson and Brophy. The Department of Chemistry may also have records from the time of Pons' research and chairmanship.

A more thorough Web search may result in additional information beyond what is available on the campus. An idea from the editor of Infinite Energy magazine, Christy Frazier, would be to scan the University records for placement on the Web for easy access by historians.

LRDI participants may be encouraged to contribute their LENR holdings to the Marriott Library Collections in a similar way to Beaudette and others.

Appendix A. Contents of NCFI Records

“This collection contains budgets, correspondence, legal contracts, memoranda, minutes, news articles, reports, and patent applications from the Office of Director of the National Cold Fusion Institute. Approximately 1.5 linear feet of the collection comes from the University of Utah Technology Transfer Office.”

Box 1	Arnold, White, and Durkee to Budget	\\
Folder	Description	Dates
1-3	Arnold, White, and Durkee - Attorneys at Law	1989-1991
4	Articles of Incorporation	1989 August 14
5	“ The Behavior of Electrochemically Compressed Hydrogen and Deuterium”	undated
6	Board of Trustees	1989-1991
7	Briefing Reports	1989-1990
8	Budget	1989
Box 2	Budget to Correspondence	
Folder	Description	Dates
1	Budget	1990-1991
2	Building Lease for 390 Wakara Way	1989 July 13
3	Bylaws	undated
4	Cold Fusion Information Packet	1989-1990
5	Collaborative Science Group	1989-1991
6	Corporate Prospectus	1989
7-10	Correspondence	1989-1990
Box 3	Correspondence to Electric Power Research Institute, Inc.	
Folder	Description	Dates
1-3	Correspondence	1990-1991; undated
4	Dehlinger, Peter J. - Patent and Trademark Law	1989
5	Electric Power Research Institute, Inc.	1989
Box 4	Electric Power Research Institute, Inc. to First Annual Conference on Cold Fusion	
Folder	Description	Dates
1	Electric Power Research Institute, Inc.	1990-1991
2	“ Electrochemically Induced Nuclear Fusion of Deuterium”	1989
3	Electrochemistry Group	1989-1991
4	Employee Intellectual and Confidential Information Agreements	1989-1991
5	Engineering Group	1989-1991
6	First Annual Conference on Cold Fusion - Conference Proceedings	1990
7	First Annual Conference on Cold Fusion - Correspondence	1989-1990
Box 5	First Annual Conference on Cold Fusion to “Investigation of Cold Fusion	
Folder	Description	Dates
1	First Annual Conference on Cold Fusion - Memoranda	1989-1990
2	First Annual Conference on Cold Fusion - Miscellaneous	1990
3	Fusion Information Center	1989-1990
4	Fusion Steering Committee	1989
5	Gas Reactions Group	1991
6	General Electric Company	1989-1991

7	Giauque, Richard W. - Giauque, Williams, Wilcox, and Bendinger Law Office	1989-1990
8	“ Investigation of Cold Fusion Phenomena in Deuterated Metals - Final Report” - Volume I. (Overview, Executive Summary, Chemistry, Physics, Gas Reactions, & Metallurgy)	1991 June
9	“ Investigation of Cold Fusion Phenomena in Deuterated Metals - Final Report” - Volume II. (Engineering)	1991 June
10	“ Investigation of Cold Fusion Phenomena in Deuterated Metals - Final Report” - Volume III. (Theoretical and Collaborative Studies)	1991 June
Box 6	Johnson Matthey Technology Centre to Miscellaneous	
Folder	Description	Dates
1	Johnson Matthey Technology Centre	1989-1991
2	License Agreement between the NCFI and the University of Utah Research Foundation	1989-1990
3-5	Memoranda	1989-1991
6	Metallurgy Group	1989-1991
7	Miscellaneous	1989-1990
Box 7	News Articles, 1989 (No Folders Stipulated.)	
Box 8	News Articles to Reorganization Plan	
Folder	Description	Dates
1-4	News Articles	1990-1991; undated
5	Peterson, Chase N. - University of Utah President	1989-1991
6	Physics Group	1989-1991
7	Pons, B. Stanley & Fleischmann, Martin - Correspondence and Memoranda	1989-1991
8	Pons, B. Stanley & Fleischmann, Martin - Royalty Agreement with University of Utah	1989
9	Procedures Manual	1989-1991
10	Program Directors’ Meetings	1989-1990
11	Reorganization Plan	1990-1991
Box 9	Resumes to Triggs, C. Gary	
Folders	Description	Dates
1	Resumes	undated
2	Second Annual Conference on Cold Fusion	1991
3	Staff Meetings - Minutes	1989-1990
4	Surface Chemistry Group	1989-1991
5-6	Third Party Disclosures	1990-1991
7	Triggs, C. Gary - Attorney at Law	1988-1990
Box 10	“Tritium Analysis...” to University of Utah Technology Transfer Office	
Folder	Description	Dates
1	“ Tritium Analysis with an Open System Analytical Procedure”	1990
2	United States Department of Energy	1989-1991
3	United States Internal Revenue Service - Tax Exemption Status Application	1990-1991
4	University of Utah Public Relations Department - Correspondence and Memoranda	1989-1991
5	University of Utah Public Relations Department - Press Releases	1989-1991
6	University of Utah Services Agreement	1990 July 1
7-9	University of Utah Technology Transfer Office - Confidential Disclosure Agreements	1989
Box 11	University of Utah Technology Transfer Office	
Folder	Description	Dates
1	Confidential Disclosure Agreements	1989-1990
2-7	Correspondence	1989-1991
Box 12	University of Utah Technology Transfer Office	

Folder	Description	Dates
1	Miscellaneous	1989
2	Patent Application U-1371, #323,513 - "Heat-Generating Method and Apparatus"	1989 March 13
3	Patent Application U-1371, #326,693 - "Neutron-Beam Method and Apparatus"	1989 March 21
4	Patent Application U-1371, #335, 233 Continuation in Part - "Heat-Generating Method and Application" (Continuation in Part of 323, 513)	1989 April 10
5	Patent Application U-1371, #338, 879 (2nd Continuation in Part) - "Heat-Generating Method and Apparatus" (Continuation in part of 335, 233, which is a Continuation in Part of 323, 513)	1989 April 14
6	Patent Application U-1371, #339, 646 - "Power-Generating Method and Apparatus"	1989 April 18
7	Patent Application U-1371, #346, 079 - "Power-Generating Method and Apparatus"	1989 May 5
8	Patent Application U-1371, #352, 478 - "Power-Generating Method and Apparatus"	1989 May 16
9	Patent Application U-1495, #394, 053 - "Improved Method for Preparing Electrodes for Use in Heat-Generating Appliance"	1989 August 15
Box 13	Utah Power and Light to Utah State Fusion/Energy Advisory Council	
Folder	Description	Dates
1	Utah Power and Light	1989-1990
2	Utah State Advisory Council on Science and Technology	1989-1991
3	Utah State Auditor	1990-1991
4	Utah State Fusion/Energy Advisory Council - Correspondence and Memoranda	1989-1991
5-6	Utah State Fusion/Energy Advisory Council - External Technical Review	1990-1991
7	Utah State Fusion/Energy Advisory Council - Quarterly Reports	1989-1991
Box 14	Utah State Fusion/Energy Advisory Council to Visiting Scientist Program	
Folder	Description	Dates
1	Utah State Fusion/Energy Advisory Council - Review by Drs. Karen Morse and Wilford Hansen	1990-1991
2	Utah State Legislative Oversight Committee	1989-1991
3	Visiting Scientist Program - Cedzynska, Krystyna	1989-1991
4	Visiting Scientist Program - Chan, Chee Yan	1989-1990
5	Visiting Scientist Program - Ghoroghchian, Jamal	1989-1990
6	Visiting Scientist Program - Other Scientists	1989-1991
7	Visiting Scientist Program - Preparata, Giuliano	1990
Box 15	Visiting Scientist Program to Williams, Gregory P.	
Folder	Description	Dates
1	Visiting Scientist Program - Takahashi, Akito	1990-1991
2	Visiting Scientist Program - Tian, Zhogqun	1990-1991
3	Visitors' Registry	1989-1991
4	Weekly Investigators' Meeting	1989-1990
5-6	Williams, Gregory P. - Attorney at Law	1989-1991

Appendix B. Contents of ENECO Categories 3 and 4

“The ENECO records consist of patents, contracts, research, office, and financial documents collected by the company. Included patents are registered by ENECO as well as patents registered by outside.”

B1. Category 3. Research

Documents in this subseries begin with collected general research (alphabetically organized) and the general research binder. These documents are then followed by the articles binder and submitted articles.

Box	Folder		1970-2005
84	1-2	Alfred Coehn and After	1994
84	3	An Apparatus and Method for Achieving High Pressures	
84	4	Anamalous effects in deuterated systems	1996
84	5	Anamalous Excess Heat Observations During Electrolysis of LiOD Using Palladium Cathode	
84	6	Apparatus and methods for providing a non-uniform distribution of ions within electrolytic cells”	
84	7	Amoco Production Co: Calorimetric experiment report	1994
84	8	Collected automobile articles	1979-1997
84	9	Bronzes	
84	10	Paper by Dr. Robert Bush	1994
84	11-12	Calorimetry of the PD-D2O Systems	1994
84	13	Chemically Assisted Nuclear Reactor the Cold Fusion Effect	
84	14	Concerning Reproducibility of Excess Power Production	
84	15	Countries in which scientists reside	
84	16	A Critical Analysis of Electrochemical Nuclear Fusion Experiments	
84	17	Cold fusion graphs	
84	18	Cold Fusion Propulsion Apparatus	
84	19	Concerning the Preliminary Examination of Calorimetric Data	1993
84	20	Calorimetry research	
84	21	Cavitation Article	1995
84	22	Cold Fusion by Sparking in Hydrogen Isotopes	1993
84	23	Cold Fusion and Space Energy Technology	
84	24	The Status of Cold Fusion	
84	25	Cold Fusion: A Challenge to Modern Science	1995
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85	1-3	Investigation of Cold Fusion Phenomena in Deuterated Metals, Vol. 1-3	1991
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88	1	Method and Apparatus for Cold Fusion	
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88	3	Molten Salts	
88	4	Nth Power Technologies Incorporated	1997
88	5	Neutrons	
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88	10	Prebon Yemane and Associates global review	2001
88	11	Properties of Electrolytes, Colloid and Biological Electrochemistry	
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88	24	Review of the Commercialization of Cold Fusion, Hal Fox	
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B2. Category 3. Personnel Documents

Documents in this series are organized alphabetically by the last name of the individual employee of ENECO. Individuals included in this series were significant agents of ENECO and its operations.

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