LENR Research Documentation Initiative What Have We Learned So Far?

15th International Workshop on Anomalies in Hydrogen Loaded Metals and CleanHME General Assembly

Assisi, Italy, September 28, 2022

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LENRGY, LLC

Austin, Texas





What Is the....

LENR Research Documentation Initiative?

Objectives

- Capture records while still available
- Preserve for possible reanalysis
- Honor the LENR "heroes"

LRDI Umbrella Storms SKINR Hagelstein Little/ Nagel Kowalski Milev Dolan EarthTech Claytor & Srinivasan Passell Tanzella SRI Int'l **Fowler** Miles Gluck **Fusion Facts** Biberian Celani Szpak Book Lomax

Status

- 31 Participants
- 20 Projects
- 22 Reports

20 LRDI Projects



LENR Research Documentation Initiative

- Origin: Storms Pilot Project
- Host: LENRGY, LLC
- Preceded by...
 - LENR public policy analysis
 - Assistance to interested parties (e.g., National Instruments)



Portion of Storms' Hardcopy Files (Now at Marriott Library)



- LRDI Projects
- Participants
- Records
- Preservation & Archiving
- Interviews
- Status of the LENR Field
- Future Opportunities

Participant: George Miley





Records: Dave Nagel

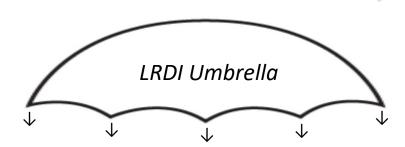
Archive: Storms at Marriott Library

LENRGY

What Have We Learned About....

LRDI Projects?

- LRDI Umbrella for Projects
- Systematic Procedure
- Confidential with Participants
- Site Visits Are Essential
- Hands-on Record Collection
- Interviews Best Conducted in Person: Phone Recording Also Available
- Document Records with Memos Leading to Project Report
- "Live" & "Legacy" Projects
 - Actively with Participant
 - Participant Not Available





LRDI Procedure



Participants?

As Researchers...

Competent Conscientious

Creative Experienced

Dedicated **Fractious**

Driven Varied

Open-Minded Secretive (mostly...)

(sometimes...)



Professional Articulate

Honest Original

Adventurous Personable

Competitive Opinionated

Hardworking Fun!

Regarding Projects...

Supportive Engaging

Cooperative Open

Receptive Helpful

High Integrity Enjoyable



Graham Hubler, Ashraf Imam, Dave Nagel

Participants' Labs?

- Variety of LENR Methods
 - Electrolytic
 - Gas loading
 - Gas discharge
 - Several others
- Variety of Signatures
 - Excess heat
 - Nuclear: tritium, low-level radiation, neutrons, etc.
- Variety of Facilities
 - University labs
 - Private commercial labs
 - Home labs

George Miley's Fusion
Studies Lab, Univ. of Illinois



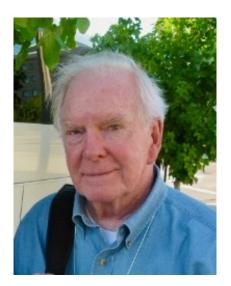


Dennis Letts' Home Lab, Austin, TX



Participants

In Memoriam...
Charles Beaudette
Peter Gluck
Ludwig Kowalski
Mahadeva Srinivasan











LENR Records?

- Generally of Two Types
 - Documents
 - Data
- Main Variables
 - Original data type
 - Collection & recording
 - Media (hardcopy, electronic)
 - Completeness
 - Recordkeeping methods
 - Retention, preservation
- Major Impact of the Digital Age!



Tom Passell with His LENR Lab Records
Boxed for Archiving
Mountain View, CA



Records Categories?

- Publications & presentations
- Unpublished reports
- Electronic files: current & legacy media
 - Documents (reports, etc.)
 - Experimental data
- Hardcopy records
- LENR laboratory
- Lab and other notebooks
- LENR books and journals (library)
- Conference proceedings (e.g., ICCF)



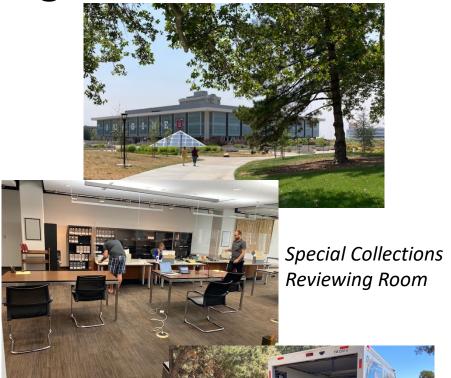


Preservation & Archiving

Univ. of Utah Marriott Library

- Different Solutions for Record Types
- Hardcopy Records: Univ. of Utah Marriott Library
 - "Home" of cold fusion
 - Strong interest in CF records
 - Substantial current holdings
 - LRDI pilot: Ed Storms, 11/2021
 - Tom Passell underway
- Electronic Records: Not Yet Determined
 - Currently backed up on two hard drives
 - Central repository needed
 - Need for access & confidentiality

Storms LENR Records
Being Loaded for Transport to Marriott Library





Interviews

- Essential for LRDI Projects
- Complement to Records
- Necessary for Research Timeline
- More than One Is Best for Completeness
- The "Glue" for Reports
- In-Person Is Superior to Phone Recording
- Recording with Cell Phone App
- Phone Call Recording with APP
- Transcription by Online Service







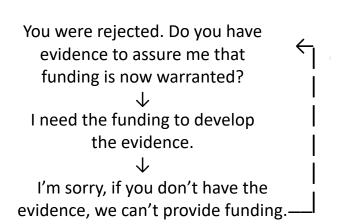
Rev.com (Transcription)

Used Successfully in LRDI



Status of the LENR Field?

- Confirmations!
- Rejection & Marginalization
 - Hallmark of the field
 - Catch-22 situation
 - Impediment for resolving reproducibility & explanation
- Research Community
 - "Circle the wagons" culture
 - Camaraderie, mutual respect
 - Self-selection of interested parties
 - Loosely bonded; sometimes fractious members



Catch-22 Diagram for Cold Fusion Status



Status of the LENR Field?

- Stand-Alone Scientific Processes & Tools
 - Society & awards (ISCMNS, Preparata Award)
 - Conferences (ICCF)
 - Publications (JCMNS)
 - Magazine (IE)
 - Online library (LENR-CANR.org)
 - Online chat (Google Group)
- Variable & Inconsistent Funding
 - Spotty resources from government agencies
 - Private investors: for-profit, angel
 - Much reliance on non-traditional sources
- Need for Younger Researchers!









LENR-CANR.ORG

A library of papers about cold fusion





Future LRDI Opportunities

- Seems Like "Just Getting Started"
 - More participants
 - Greater depth for existing projects
- Permanent Archive
 - Marriott Library for hardcopy
 - Solution TBD for electronic
- Integrated LRDI Report
 - What has been achieved?
 - What has been learned?

- Outreach & Communications: Emphasize the Public Realm
 - Publications & magazine articles
 - Presentations
 - Within and outside the LENR field
 - Seek permission for project reports to public realm
 - LRDI findings to broader scientific community
 - Advancing the LENR cause: How can this effort improve the prospects of LENR?



In Conclusion...

- LENR Realization Is Essential to Humanity!
 - Clean, cheap, safe, reliable energy source
 - Abatement of global climate change
- The Loss of LENR Research Records Would Be a Tragedy
 - For the participants
 - For the field
 - For achieving LENR and its benefits
 - For the future of humankind

- The LRDI Objectives are Being Met
 - Methods well established
 - Many records preserved
 - Long-term archive partly solved
 - Universally accepted as a good idea
 - Powerful combination of records and interviews
- LRDI Projects are Fun!



Thank You!

- Participants (and several spouses!)
- Anthropocene Institute
- New Energy Foundation & IE Magazine
- Marriott Library, University of Utah
- LENR-CANR.org
- Ed Storms: Pilot Projects for the LRDI and Marriott Library
- To All of You for Listening!

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