

Open Source Science Applied to CMNS Research

A Paradigm for Enhancing Cold Fusion Prospects and the Public Interest

Thomas W. Grimshaw, Ph.D.; Master of Public Affairs (pending)
Lyndon B Johnson School of Public Affairs, The University of Texas at Austin\|
ICCF-14, Washington, D.C., August 2008

What is Open Source Science (OSSc)?

- Research through voluntary contributions
- Highly distributed – worldwide participants

What are its characteristics?

- Collaborative – inputs from many fields
- Uncompensated participation
- Extensive use of digital tools, esp. Internet
- Often non-economic “drivers”

Where did OSSc come from?

- Reaction to high cost of proprietary products
- Originated in Open Source software movement (e.g., Linux)
- Return to origins of software development; early days of computers
- Spread to other applications
 - Open Access (publications)
 - Open Source Science

What are its “drivers”?

- Usually non-economic
- Often to establish research reputation
- Creative outlet opportunity: artistic expression
- Desire to contribute to human welfare

Where does OSSc fit in the world of research?

- Subject of the Sociology of Science
- Represents return to roots of research?
- “Mertonian” science – CUDOS
 - Communalism
 - Universalism
 - Disinterestedness
 - Originality
 - Skepticism
- Knowledge as a **common good** rather than proprietary product

What are the Advantages of OSSc?

- Improved communication & collaboration among researchers – faster progress
- Increased contributions from other fields of science – new perspectives & insights
- Better availability of CMNS information: improved prospects for acceptance
- CMNS knowledge more likely to become a **common good**
- Public Interest is better served with open access to research results

Do CMNS researchers already use OSSc-type methods?

- YES! Some online examples...
- Posting of CMNS papers
 - LENR-CANR website
- Research dialogue – experiment & theory
 - CMNS Google Groups (by invitation)
- News and developments
 - New Energy Times
 - Infinite Energy
- Electronic books
 - “A Student’s Guide to Cold Fusion” (Storms)
 - “Cold Fusion and the Future” (Rothwell)
- Open-access publication
 - Journal of Condensed Matter Nuclear Science

Can OSSc methods further enhance CMNS research?

- YES! But how...?
- Online datasets: raw experimental data for collaborative & alternative interpretations
- Wiki: public information & education, public acceptance & policy change
- Digital dashboard: monitoring change, reporting developments
- Membership database: include interests, resources
- Webinars: experimental demonstrations, public education, conference presentations
- Blogs: dialogue & interactions

Are there existing successful OSSc applications?

- Yes: ORS, a good example to follow...
 - Schweik & others, 2001, 2005, 2005, 2007
 - www.orspublic.org
 - Chesapeake Bay Watershed
 - Online environmental datasets
 - Includes search function, list of sponsors
 - Registration required
- And there are others...

What about Intellectual Property considerations?

- Private interest considerations emphasize copyright and patent protection
- But IP also used to protect knowledge as common good
 - Copyleft
 - GNU General Public License
 - Open Invention
- Not yet as widely used for OSSc protection as for software

What specifically would need to be done?

1. Adopt OSSc by professional organization (e.g., ISCMNS)
2. Establish oversight/approval committee within existing structure
3. Embrace current OSSc-type functions & activities (but don’t interfere)
4. Engage the power of OSSc methods through added methods & tools
5. Make use of available on-line working examples; e.g., Open Research System
6. Set up long-term organization, management, and support (funding)
7. Evolve and enhance as opportunities are identified

Postscript: Can Cold Fusion Pass the Skeptics’ “Baloney Detection” Test?

–But that’s another story...

