



DOE Office of Scientific and Technical Information
A Partnership Spanning More Than Two Decades
GPO Federal Depository Library Program



Institutional Repositories in the Physical Sciences:
Enhancing Searchability

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Office of Scientific and Technical Information
U.S. Department of Energy

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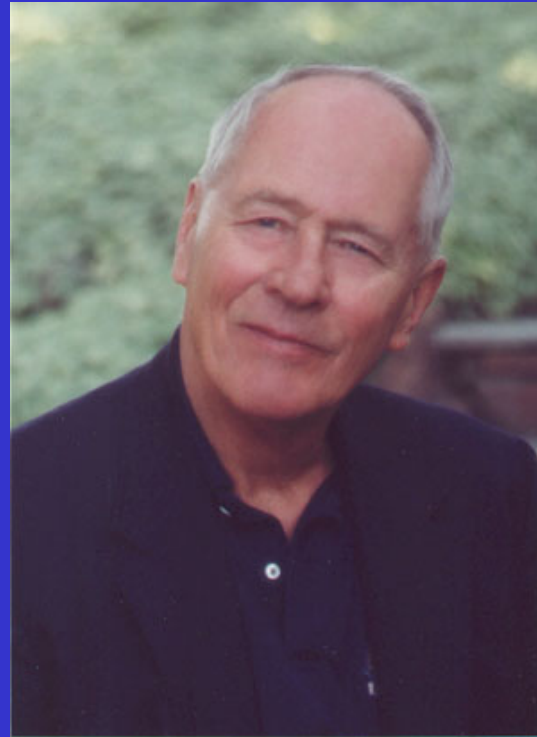
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“My favorite people are
archivists and librarians”

Stephen Ambrose, Author
C-SPAN Interview; 2000





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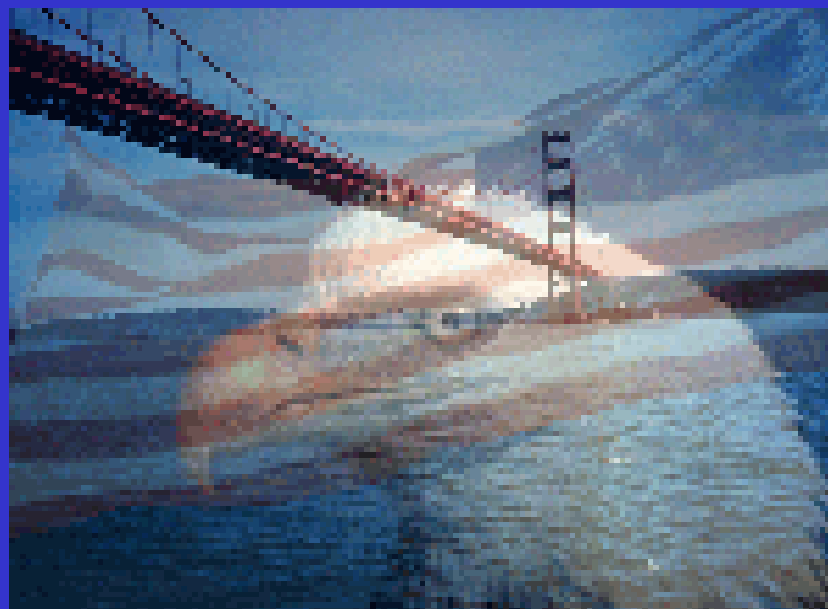


Securing Our Future

Science knowledge plays an essential role in securing our future

Our superior technology is the physical expression of scientific and technical knowledge

At OSTI, our role is to project the force of knowledge





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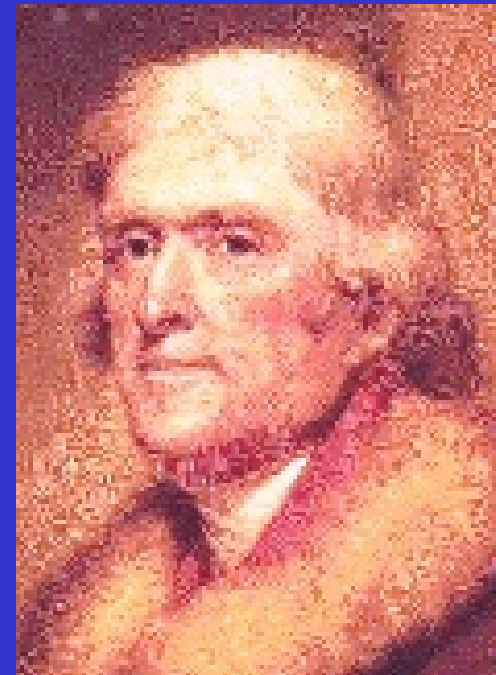
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Premiums of Encouragement

The value of science to a republican people, the security it gives to liberty by enlightening the minds of its citizens, the protection it affords against foreign power, the virtue it inculcates, the just emulation of the distinction it confers on nations foremost in it; in short, its identification with power, morals, order and happiness (which merits to it premiums of encouragement rather than repressive taxes), are considerations that should always be present and bear with their just weight." --Thomas Jefferson:

On the Book Duty, 1821





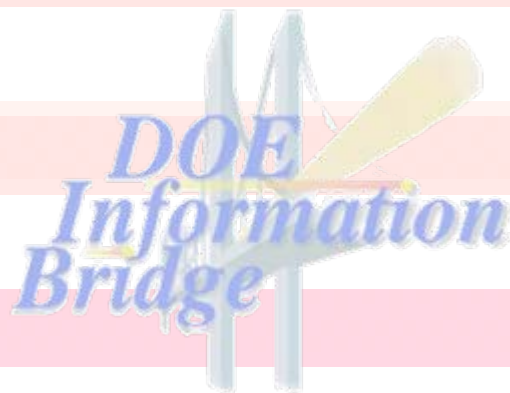
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A Public Good

~~AGRICOLA~~



NARA

PubMed

ERIC



NTRS

NASA Technical Reports Server



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Harvesting

OSTI's job is to use the Internet to share knowledge essential to progress and we are deploying the Internet as fast as we can.



Sharing the Knowledge



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OSTI is in the Business of Cognitive Production

OSTI is a transmission route to get federal information from the producers to the users

OSTI develops finding aids and provides through GPO Access to help users find the information they need





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New Directions for Federal Information

Moving from information
delivery to knowledge
management

Tremendous potential for
further application of
Distributed Search
technology

OAI





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A Searchable Gateway to Preprint Servers

OSTI's Preprint Network is the ultimate "one-stop shopping" site for preprints in the scientific and technical areas

Currently there are 10,000 isolated islands of information integrated such that they can be used like one searchable journal



Physics

Materials
Environmental Sciences

Chemistry

Nuclear Medicine

Biology



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Archiving Opportunities **OAI**

OSTI has successfully adopted OAI in a proof-of-principle exercise.

If OSTI were to fully adopt OAI, we would need to make each of our relevant databases compliant with the OAI protocol.

OSTI would want to create tools by which such data are harvested and combine with data from other agencies and other sources to become a federal service provider.

As an OAI service provider, we would harvest DOE science knowledge free from all access barriers to be used as a basis for building value added services.

The pipeline to bring information to the public would be immense.

An Opportunity to Leverage Federal Resources



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<http://www.25yearsofenergy.gov>