



Scientific Government Information

Department of Energy Databases
and Federated Search Tools

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Scientific Government Information Agenda

1. What is Energy?
2. What is OSTI?
3. Federated Searching – The Big 3
4. Science Accelerator Suite of Products
5. DOE DataExplorer
6. ScienceLab
7. ScienceEducation.gov



Science Accelerator Suite

- Information Bridge
- Energy Citations Database
- The E-Print Network
- DOepatents
- Science Conference Proceedings
- DOE R&D Project Summaries
- Federal R&D Project Summaries
- DOE R&D Accomplishments
- Energy Science and Technology Software Center
- EnergyFiles

What is Energy?

- It is not a distinct discipline.
- Energy can be found in almost all scientific disciplines.
- OSTI Subject Categories:
<http://www.osti.gov/MARC/subjectCategories.jsp>

OSTI develops a number of databases and search tools, all accessible through the OSTI Home Page (www.osti.gov).

Office of Scientific and Technical Information

OSTI homepage: www.osti.gov

- Resources, databases, federated search tools
- News, blog, RSS
- Flyers
- Widgets
- MARC records



OSTI History

To fully understand OSTI's resources, you must be aware of OSTI's history.

- Manhattan Project 1942-1946
 - Weapons production
- Atomic Energy Commission 1946-1974
 - Weapons and peaceful uses of atomic energy
- Energy Research and Development Administration 1975-1977
 - Expanded areas of interest to all forms of energy
- Department of Energy 1977-
 - All forms of energy



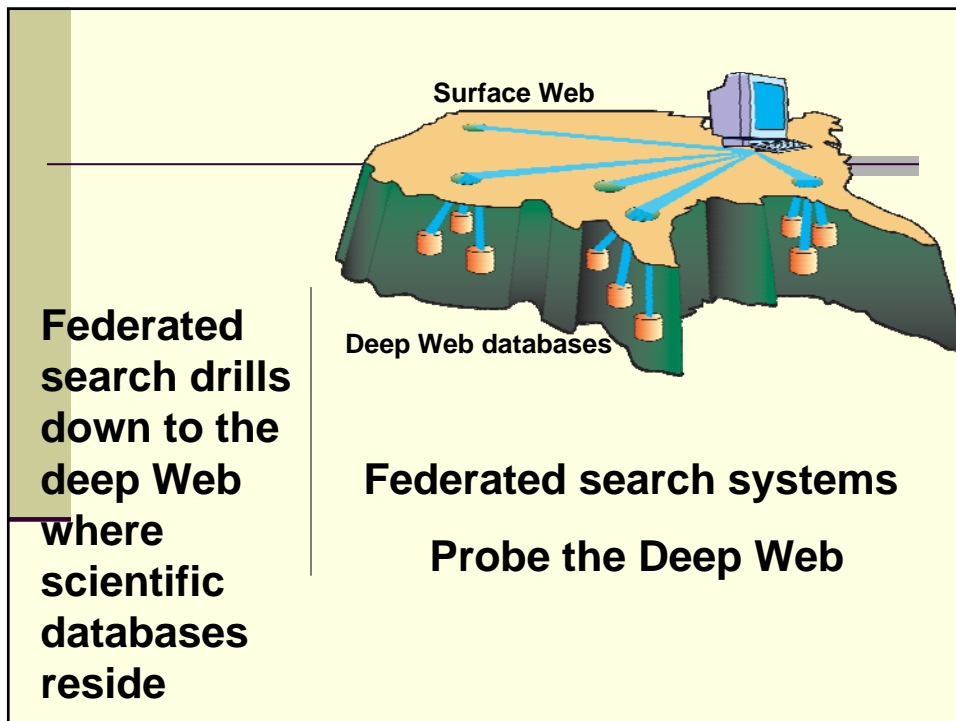
OSTI History

- AEC: Clearinghouse for worldwide information on nuclear energy
 - Government publications, commercial publishers, research centers, journal articles, conference papers, patents.
- ERDA: clearinghouse for nuclear information and other forms of energy
- DOE: Clearinghouse for technical reports, patents, journal articles and conference papers produced by DOE employees and contractors.
- OSTIblog: What's in the OSTI Legacy Collection
http://www.osti.gov/ostiblog/home/entry/what_s_in_the_osti



OSTI History

- Over the years, OSTI has produced a number of printed products and databases.
- There is not a one-to-one relationship between printed products and databases.
- In recent years, OSTI has been a leader in developing federated searching to provide greater access to energy related information.



Federated Search Products

- 1. Science Accelerator
- 2. Science.gov
- 3. WorldWideScience.org



Science Accelerator

- A federate search of ten OSTI databases and federated search products.
- <http://www.scienceaccelerator.gov/index.shtml>



Interface similar to Google Under the hood, NOT like Google

- USA.gov's portal for science
- Resources represent 97 percent of the federal R&D budget!

Departments of Agriculture, Commerce, Defense, Education, Energy, Health and Human Services, the Interior, Environmental Protection Agency, Library of Congress, National Aeronautics and Space Administration, National Science Foundation, United States Government Printing Office, and the National Archives and Records Administration

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- Searches over 38 databases and 1,950 selected websites.
- 18 scientific and technical organizations from 14 federal agencies contribute to Science.gov.
- Featured Searches, Special Collections, Featured Websites, Explore Science Websites by Topic.
- <http://www.science.gov/>

OSTI's Address



- 61 databases or portals from 56 countries and international organizations.
- Latest database: Environment Research Funders' Forum (ERFF) Research Database (United Kingdom)
- Science.gov is the U.S. contribution to WorldWideScience.org.
- <http://worldwidescience.org/>

Science Accelerator Databases and Tools

The OSTI resource that is probably the best known to librarians is the **Information Bridge**.

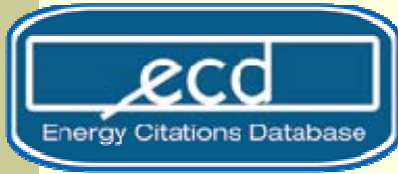
- Initially developed as a joint product of OSTI and GPO to provide depository libraries access to full text DOE scientific and technical reports.
- Especially popular with depository librarians as it replaced the microfiche reports that had been distributed for many years.



- Provides free public access to over 210,000 full-text documents and bibliographic citations of Department of Energy research report literature.
- Documents are primarily from 1991 forward and were produced by DOE, the DOE contractor community, and/or DOE grantees.
- Legacy documents are added as they become available in electronic format.
- <http://www.osti.gov/bridge/index.jsp>

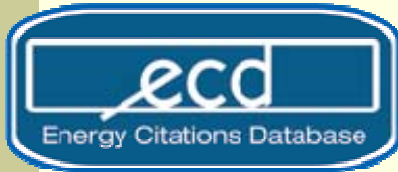
MARC Records for full text reports

- Over 210,000 MARC records for full text reports included in the Information Bridge.
- The MARC records are free.
- All records include URLs to link to the full text reports.
- Downloaded from OSTI web page.
- Can choose to download records by subject category, year or OSTI ID.
- <http://www.osti.gov/marcrecords>



Energy Citations Database

- Provides free access to over 2.6 million science research citations.
- Coverage includes chemistry, physics, materials, environmental science, geology, engineering, mathematics, climatology, oceanography, computer science and related disciplines.
- Includes bibliographic citations to report literature, conference papers, journal articles, books, dissertations, and patents.



Energy Citations Database

- Contains over 2.6 million science research citations.
- Contains over 223,000 electronic documents
- Contains 1.6 million journal article citations
- Contains 250,000 journal articles that have DOIs linking to full text.
- Contains the entire Information Bridge

<http://www.osti.gov/energycitations/index.jsp>

Other OSTI Collections



OSTI Federated Search Products



The E-Print Network

- A gateway to over 31,780 researcher websites, 51 databases and 3140 professional society sites worldwide.
- Contains over 5 million e-prints in basic and applied sciences, primarily in physics but also including subject areas such as chemistry, biology and life sciences, materials science, nuclear sciences and engineering, energy research, computer and information technologies, and other disciplines of interest to DOE.
- <http://www.osti.gov/eprints/>



DOepatents

- A searchable database of patent information resulting from DOE-sponsored research and development (R&D).
- Demonstrates DOE's contribution to scientific progress in the physical sciences and other disciplines.
- Consists of bibliographic records, with full text where available, either via a PDF file or an HTML link to the record at the United States Patent and Trademark Office.
- <http://www.osti.gov/doepatents/>



Science Conference Proceedings

- **Provides access to science and technology conference proceedings and conference papers from a number of authoritative sites (professional societies and national labs, largely) whose areas of interest in the physical sciences and technology intersect those of the Department of Energy.**
- <http://www.osti.gov/scienceconferences>



DOE R&D Project Summaries

- Project summaries of ongoing or recently completed Department of Energy research projects.
- Includes projects that DOE sponsored through a variety of funding mechanisms, including grants, contracts, or cooperative agreements.
- <http://www.osti.gov/rdprojects/>



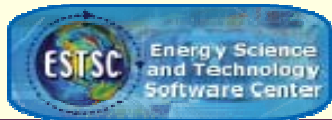
Federal R&D Projects Summaries

- Search across 9 federal research and development project summaries databases.
- DOD, DOE, EPA, NASA, NIH, NSF, SBA, TRB, USDA.
- <http://www.osti.gov/fedrnd/>



DOE R&D Accomplishments

- Information about the outcomes of **past** DOE R&D that have had significant economic impact, have improved people's lives, or have been widely recognized as remarkable advances in science.
- **Nobel Laureates** and Enrico Fermi Awardees associated with the Department of Energy or predecessor agencies.
- <http://www.osti.gov/accomplishments/>



Energy Science and Technology Software Center

- The U.S. Department of Energy's centralized software management facility.
- Licenses and distributes Federally funded scientific and technical software developed by the national laboratories, other facilities and DOE contractors.
- Contains selected scientific and technical software from the Nuclear Energy Agency (NEA)
- <http://www.osti.gov/estsc/>



EnergyFiles

- Energy Science and Technology Virtual Library.
- One of OSTI's earliest federated search products.
- Over 500 databases and Web sites containing information and resources pertaining to science and technology of interest to the Department of Energy, with an emphasis on the physical sciences.
- <http://www.osti.gov/energyfiles/>

- We have just seen ten databases and federated search tools from OSTI.
- What do you do when you can't remember which one to use for your search needs?
- ScienceAccelerator
<http://www.scienceaccelerator.gov/>

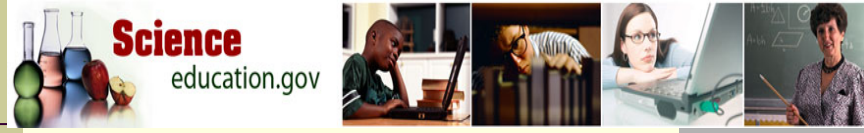


DOE Data Explorer

- Finds scientific research data - such as computer simulations, numeric data files, figures and plots, interactive maps, multimedia, and scientific images - generated in the course of DOE-sponsored research in various science disciplines.
- <http://www.osti.gov/dataexplorer/>



- Student Online Lab for Science Stuff!
- Broken down by grade level.
- Experiments, Ask an Expert, Internships, Summer Camps, Science Competitions, Science Careers, Summer Camps.
- <http://www.osti.gov/sciencelab/index.html>



- To be released very soon!
- Find federal science education resources.
- Participate in ScienceEducation.gov community.
- Filter by agency
- Filter by Grade Band: K-2, 3-4, 5-6, 7-9, 10-12, Higher Ed
- Add comments, tags and ratings.

Questions?

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