# OSTI - Accelerating Science Information

Dr. Walter L. Warnick Director U.S. Department of Energy Office of Scientific and Technical Information

> Federal Depository Library Conference Arlington, Virginia October 21, 2008



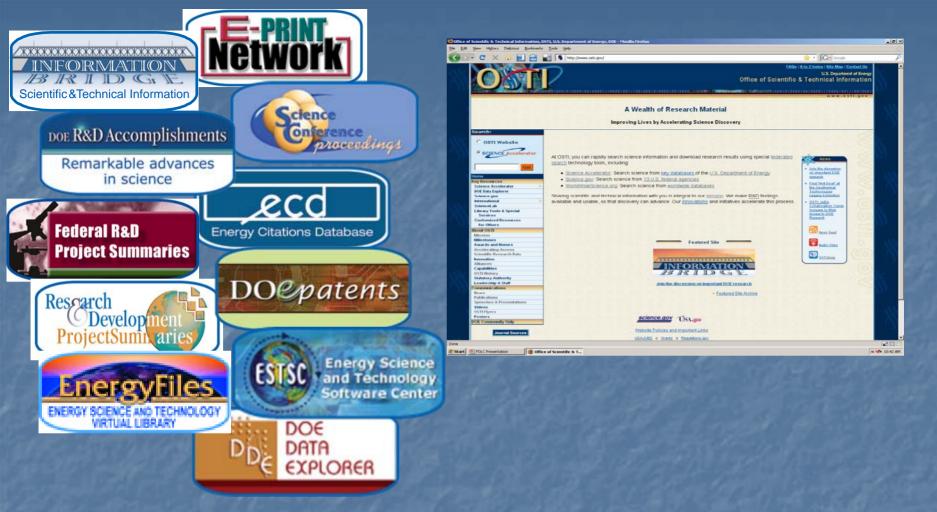




## **OSTI** Mission

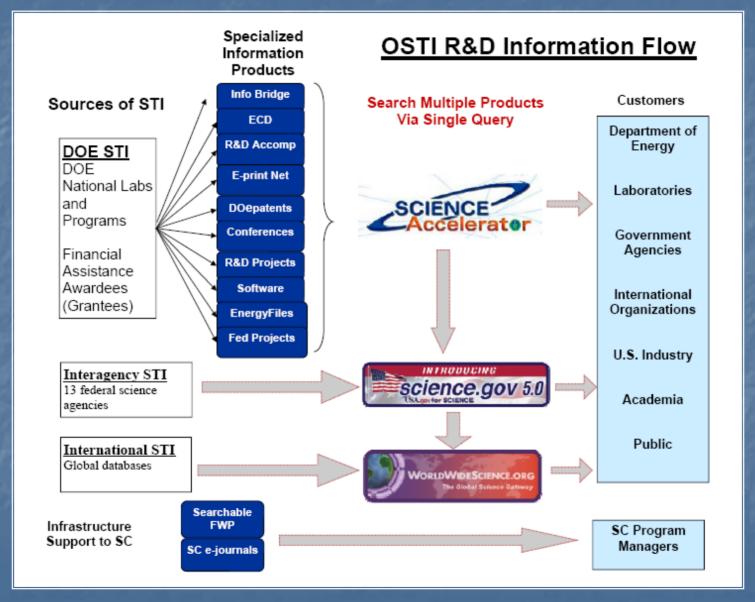
To advance science and sustain technological creativity by making R&D findings available and useful to DOE researchers and the American people



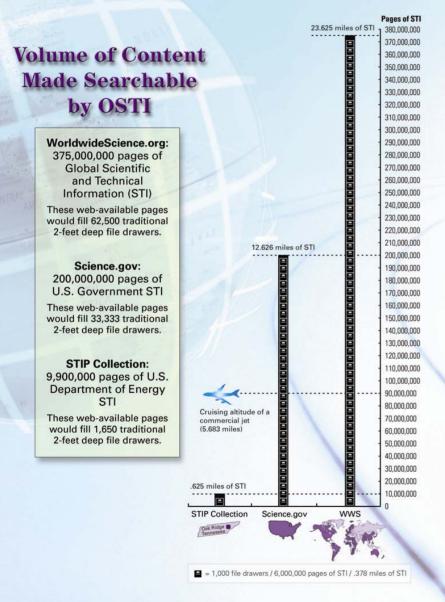


OSTI develops a number of databases and search tools, all accessible through the OSTI Home Page (www.osti.gov).

## From STI Sources to Customers ...



### OSTI Ensures Access to Non-Googleable Science



Science progresses as knowledge is shared

OSTI Corollary: Accelerating the sharing of knowledge accelerates the advancement of science

Through OSTI products, researchers and the public can access a science page count comparable to, but not duplicative of, Google's entire science content.



# The OSTI resource that is probably the best known to depository 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.

Information Bridge: DOE Scientific and Technical Information	mation - Fielded Sear	ch - Windows Internet Explorer			_ @ ×
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Fielded Search provides a very sophisticated search experience.

Reports fall into the disciplines of physics, chemistry, materials, biology, environmental sciences, energy technologies, engineering, computer and information science, renewable energy, and other topics of interest related to the DOE mission.

### Results return links to full text

Content: DOE STI from 1991 forward

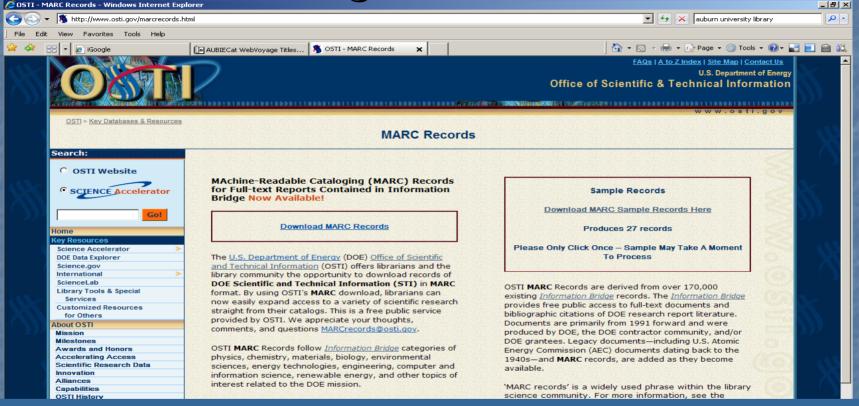
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	Size	Identifier	Title	Creator/Author (s)	Pub Date
	<b>7</b> 2	UCRL-JC-131558	Oulf Coast assessment overview/charge to the workshop	MacCracken, M.C	1998 Apr 30
	110	PNL-SA23172; CONF-9310851	Climate uncertainty and the regional economic impacts of global climate change	Scott, M.J. ; Liebetrau, A.M. ; Lopresti, C.A.	1993 Oct 01
	26 MB	920083	DoD Climate Change Fuel Cell Program	Steven A. Gabrielle	2007 Apr 30
	200K	CONF-94103001	Integrated assessment and the relation between land-use change and climate change	Date, V.II.	1994 Oct 07
	<b>7</b>	825015	Improved Cloud-Radiation Parameterization for GCMs through the ARM Program. Final Progress Report	Kehl J. T.	2004 Mar 31
	543 K	841471	Tools for Teaching Climate Change Studies	Maestas, A.M. : Jones, L.A.	2005 Mar 18
	72 1885	824980	EVALUATING SHORT-TERM CLIMATE VARIABILITY IN THE LATE MOLOCENE OF THE NORTHERN GREAT PLANS		1999 Sep 01
	1.00	ANL/DIS/CP87040; CONF-9505276Summ.	International Conference on Climate Change Adaptation Assessments: Conference summary and statement		1995 Aug 01
	20 673 K	BNL66037; CONF-981077	Bole of aerosols in radiative forcing of climate change: Global mean and uncertainties	Schwartz, S.E.	1998 Oct 01
	23 MB	ORNL/CDIAC-117	Selected Translated Abstracts of Chinese-Lanousce Climate Chance Publications	Cushman, R.M. ; Burtis, M.D.	1999 May 01
	2.50	USCSP96005616; CONF-9509320Summ.	Climate variability and climate change vulnerability and adaptation. Workshop summary	Bhatti, N. ; Cirilo, R.R. ; Dison, R.K.	1995 Dec 31
	2	ANU/ER/PP83960	Climate change effects on forests: A critical review	Loshle, C, ; LeBlanc, D,	1996 Feb-01
	720 1 MB	LA-UR-94-1144; CONF-9404261	Linking science more closely to policy-making: Global climate change and the national reorganization of science and technology policy	Glasser, R.D.	1994 Apr 01
	2 3 MB	ANL/RP-75587	Global climate change and international security	Rice M.	1991 Jan 01
	2. 3 MB	ANURP75587	Global climate change and international security. Report on a conference held at Argonne National Laboratory. May 8–10, 1991	Rice, M.	1991 Dec 31
	2	UCRL-JC128650; CONF-980121	National assessment of the consequences of climate change for the United States	MacCracken, M. C., LLNL	1997 Oct 01
	(a) Upda	te Presentation 26 Information Bridg	e: D		« 🍫 8:45 AN

Older reports are being digitized and added as funds permit

## New feature: Document Discussion



# You requested it! MARC Records from Information Bridge Launched June 08



OSTI now provides free MARC records for the reports in Information Bridge. These can be loaded into library catalogs. This means your patrons will not be required to search a separate database to find energy-related STI

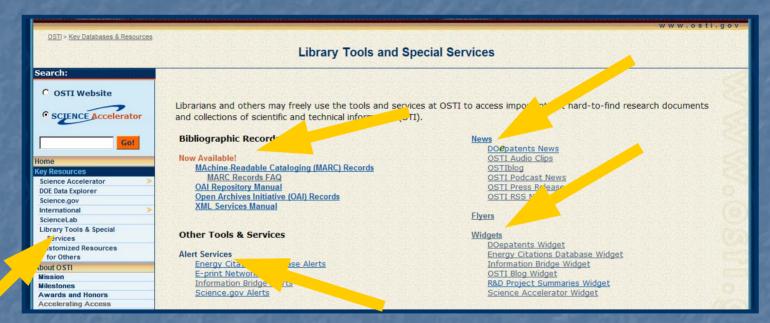
# You requested it! MARC Records

- Libraries have the option of loading over 180,000 records.
- Each record has an 856 field with a URL for the full text.
- Libraries can select specific subject categories for which to download records and also choose the years desired.
- The MARC records are derived from the existing OSTI records. By that, we mean that OSTI did not have catalogers creating each individual MARC record. We created a program to take the information from the existing records used by the Information Bridge and place it in the appropriate MARC field.

# You requested it! MARC Records

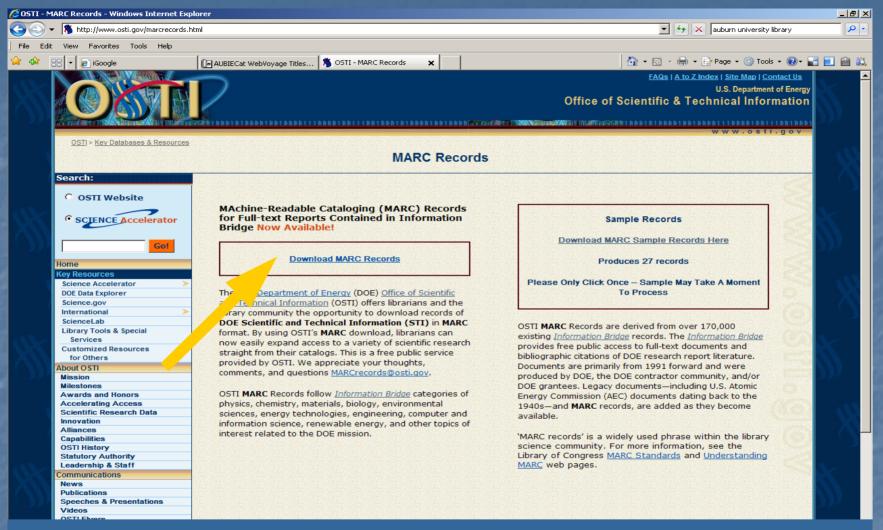
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Summary	The U.S. Depart	ment of Energy 'bis Advanced \	Vehicle Testing Activity (AVTA)				CU-Springs	
		(HEV). To date, the AVTA has o es on 26 HEVs. The HEV models						
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	repair events a	id Accord; Chevrolet Silverado; ind closed track testing to docu ting, two of each HEV model arn ind fuel use is recorded and us- s are rerun and each HEV batte tric Transportation Applications vailable in paper and microfiche 13727 y Fuel Hybrid Testing Vehicles tation. Consumption, And Utilizz otion. g. sting.	e ariven to 160,000 miles per ed to compile life-cycle costs. I	venicle within At the conclusi	to months, during whi	on maintenance and s of fleet testing, the		
	SAE J1634 tests	are rerun and each HEV batte	ry pack is tested. These AVTA	testing activiti	es are conducted by th	he Idaho National		~
	Laboratory, Electrosults	ctric Transportation Applications	s, and Exponent Failure Analys	sis Associates.	This paper discusses	the testing methods and		5
Note(S)	Report is also a	vailable in paper and microfiche	from NTIS.				- <b>NO</b>	
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#### Get to MARC records from our "Library Tools and Special Services" page



#### MARC records and OAI links

- Alert Services
  - News
- Flyers
- Widgets



# Click on "Download MARC Records" to go to a page with the various download options.



#### MARC Records System

For retrieval of Information Bridge catalog records in the MARC format

#### Generate Records by Subject Category

Use this option to search for records by Subject Category. These records can be filtered by a publication date range and larger files can be broken

down into multiple files.

Search By Subject Categories

#### Generate Records by Year

Use this option to download files by publication year. Larger files can be broken down into multiple files. Search By Year

#### Generate Records by OSTI ID

Use this option to download files by a particular OSTI ID or multiple OSTI ID's. Search By OSTI ID

#### Search By Year | Search By Subject Categories | Search By OSTHD

The DOE Office of Scientific and Technical Information (OSTI) is the Department of Energy's central scientific and technical information coordinating office responsible for ensuring that STI is identified, processed, disseminated, and preserved for appropriate access and for accomplishment of DOE's mission. The information provided to OSTI is handled in accordance with the access/distribution limitation provided in the DOE F 241. Unclassified, unlimited STI is announced to the public on the DOE Information Bridge (<a href="https://www.osti.gov/bridge">www.osti.gov/bridge</a>) or Energy Citations Database (<a href="https://www.osti.gov/bridge">www.osti.gov/bridge</a>) or Energy Citations

This is a U.S. Federal Government Computer System. To protect the system from unauthorized use and to ensure that it is functioning properly, activities on this system may be monitored, recorded, and subject to audit. Use of this system constitutes expressed consent to such monitoring and recording. Any unauthorized access to or use of this information system is prohibited and could make you subject to criminal and civil penalties.

# Here you can select to download records *by subject category*, *by year* or *by OSTI ID number*.

Done

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U.S. Department of Ener...

Questions or comments on MARC **Records**? MARCrecords@osti.gov osti.gov/tools Demos of MARC records and more info available at

the OSTI booth.



Retrospective database of energy related STI, including depository microfiche in many libraries.

Energy Citations Database
Contains over 2.3 million citations
Nuclear Science Abstracts, 1948-1976
Energy Research Abstracts, 1976-1995
Entire Information Bridge

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DOI	<u>10.1016/i.jcp.2007.02.034</u>	
Title	The origins of computer weather prediction and climate modeling	
Creator/Author	Lynch, Peter [Meteorology and Climate Centre, School of Mathematical Sciences, University College Dublin, Belfield (Ireland)], E-mail: Peter.Lynch@	ucd.ie
Publication Date	2008 Mar 20	
OSTI Identifier	OSTI ID: 21028314	
Other Number(s)	Journal ID: ISSN 0021-9991; JCTPAH; TRN: US08R0985050229	
Resource Type	Journal Article	
Resource Relation	Journal: Journal of Computational Physics; Journal Volume: 227; Journal Issue: 7; Other Information: DOI: 10.1016/j.jcp.2007.02.034; PII: S0021-99: B.V., Amsterdam, The Netherlands, All rights reserved; Country of input: International Atomic Energy Agency (IAEA)	91(07)00095-2; Copyright (c) 2007 Elsevier Science
Subject	71 CLASSICAL AND QUANTUM MECHANICS, GENERAL PHYSICS; CLIMATE MODELS; CLIMATES; CLIMATIC CHANGE; COMPUTERIZED SIMULAT WEATHER	ION; EQUATIONS; FORECASTING; SATELLITES;
Description/Abstract	t Numerical simulation of an ever-increasing range of geophysical phenomena is adding enormously to our understanding of complex processes in ongoing climate change will be far-reaching. Earth System Models are capable of replicating climate regimes of past millennia and are the best me The basic ideas of numerical forecasting and climate modeling were developed about a century and hong before the first electronic computer was	ans we have of predicting the future of our climate.

Notice above the title there is a DOI The Digital Object Identifier (DOI®) System is for identifying content objects in the digital environment. Many library databases provide access to the fulltext of journal articles using DOIs.

## **Other OSTI Collections**

#### DOE R&D Accomplishments Remarkable advances in science







## **OSTI Federated Search Products**









## Wow!

# OSTI has a lot of databases and search tools!

How will I ever remember all of them or know which ones to search?



# **Science Accelerator** is a federated search tool that covers all of the OSTI products that we have just seen.

Done		🖬 🖬 🖸
2) Start Store FDLC Presentation	ccelerator,	« 🍫 10:13 AM

**Federated** search drills down to the deep Web where scientific databases reside

Deep Web databases

**Surface Web** 

Federated search systems probe the deep web

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Use double quotes for searching an exact phrase.	
<ul> <li>☑ ✓ All Resources</li> <li>☑ ☑ Recent R&amp;D Results</li> <li>☑ Full-text documents (<u>DOE Information Bridge</u>)</li> <li>☑ Scientific e-prints (<u>E-print Network</u>)</li> </ul>	
<ul> <li>✓ Conference papers and proceedings (<u>Science Conference Proceedings</u>)</li> <li>✓ Legacy R&amp;D Results (1943 forward)</li> <li>✓ Significant outcomes via full-text documents and/or DOE-associated Nobel Laureates(<u>DOE R&amp;D Accomplishments</u>)</li> <li>✓ Patents resulting from DOE R&amp;D (<u>DOE patents</u>)</li> <li>✓ Bibliographic records (<u>Energy Citations Database</u>)</li> </ul>	
<ul> <li>☑ R&amp;D Project Descriptions</li> <li>☑ Ongoing and recent DOE research summaries (<u>DOE R&amp;D Project Summaries</u>)</li> <li>☑ Federal research summaries (<u>Federal R&amp;D Project Summaries</u>)</li> <li>☑ Other Science Resources</li> <li>☑ Federal/v-funded scientific and technical software(Energy Science and Technology Software Center)</li> </ul>	

Search all of the databases or select individual databases.

Search recent R&D results or search legacy R&D dating back to the 1940s.

### Search R&D product descriptions or other science resources.

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#### > Get results ranked by relevance

- Get immediate results, and an option to view more results as databases complete searching
- View results or opt to go directly to most relevant databases for further exploration



#### 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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🔏 Science.gov v5.0: Search Results	- Windows Internet Explorer	
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<ul> <li>Alternative Fuels (189)</li> <li>Method (134)</li> <li>Activity (129)</li> <li>Department of Energy</li> </ul>	Shale Oil: Alternative Energy or Environmental Degradation [electronic resource].       typically defined as coming from sources that do not deplete natural resources or harm the environment. Wind power is a typical example. The matternative is used	
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#### **Science.gov Version 5.0**

Quadrupled the content – now searches 200 million pages of science information

Offers clustering technology, Wikipedia results and EurekAlert! Science News

>Updated Alerts feature

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Science Accelerator covers DOE science.

Science.gov covers U.S. government science

the next logical step ... the world!

# WORLDWIDESCIENCE.ORG



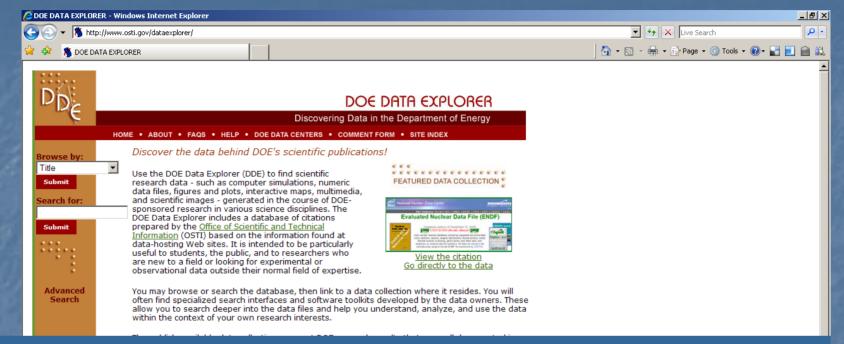
- A federation of the leading science portals sponsored by the governments and national institutions of over 50 countries
- A quantity of science (more than 375 million pages from every inhabited continent) comparable to, but not duplicative of, Google's entire science content.
- A breakthrough in content enabled by breakthrough technology



Officials from organizations representing 38 countries gathered in Seoul, Korea to formalize their commitment to sustain and build upon the online gateway to the world's science information.

The Alliance membership covers six continents and nearly half of the world's population. China just joined!

## What's New at OSTI?



Types of content included in the DOE Data Explorer: > Computer Models/Simulations

- > Figures/Plots
- Interactive data maps
- > Multimedia
- Numeric Files/Datasets
- Scientific images
- Specialized Mix

## Questions?

#### Don't forget to visit the OSTI booth!

## Dr. Walter L. Warnick Director DOE Office of Scientific and Technical Information