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Focus Areas for FY 2002

Peer-Reviewed Journal Literature

- **Departmental goal in FY02: Measurable increase in DOE journal literature**

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IG Audit Report on "Peer-Reviewed Scientific Literature Generated at DOE's Light Sources"

www.ig.doe.gov/pdf/ig-0520.pdf

OBJECTIVE:
Determine if abstracts of peer-reviewed scientific journal articles generated from work performed at the Department's light sources were available for public dissemination through OSTI

RESULTS OF AUDIT:
Not all peer-reviewed scientific journal abstracts generated from work performed at DOE light sources in FY 2000 were available for dissemination through OSTI

Office of Inspector General

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IG Audit Report on "Peer-Reviewed Scientific Literature Generated at DOE's Light Sources"

RECOMMENDATIONS:

- **Periodically update the PubSCIENCE database with bibliographic records made available by the light sources in accordance with Departmental Order 241.1A**
- **Identify and recover abstracts missing from PubSCIENCE from those publishers having agreements with OSTI**
- **Collect and disseminate journal citation data from the light sources for peer-reviewed articles not covered by publisher agreements**

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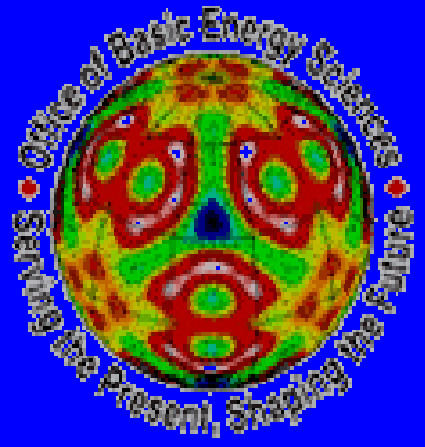
Corrective Departmental Action

- DOE's Office of Basic Energy Sciences (BES) sends memo
- OSTI communicates with STI community
- Technology Options Considered



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Journal Articles and Copyright

Concern expressed about journal article announcement records and full text journal articles sent to OSTI (copyright infringement)

DOE General Counsel Position

- Appropriate for DOE and DOE Contractors to provide OSTI journal citations and copies of journal articles submitted to publishers; approved for publication; or already published
- Journal copyright protects only the journal's formatting
- DOE entities free to send articles as produced at Government expense, but should not send copies formatted by the journal

Submission of Journal Reprints

- When "reprint" is submitted and is copyrighted by the publisher - submitter should mark DOE F 241.1 "announcement citation only".
- OSTI does not process or make the reprint itself available, but will announce it and cite availability from the publisher.

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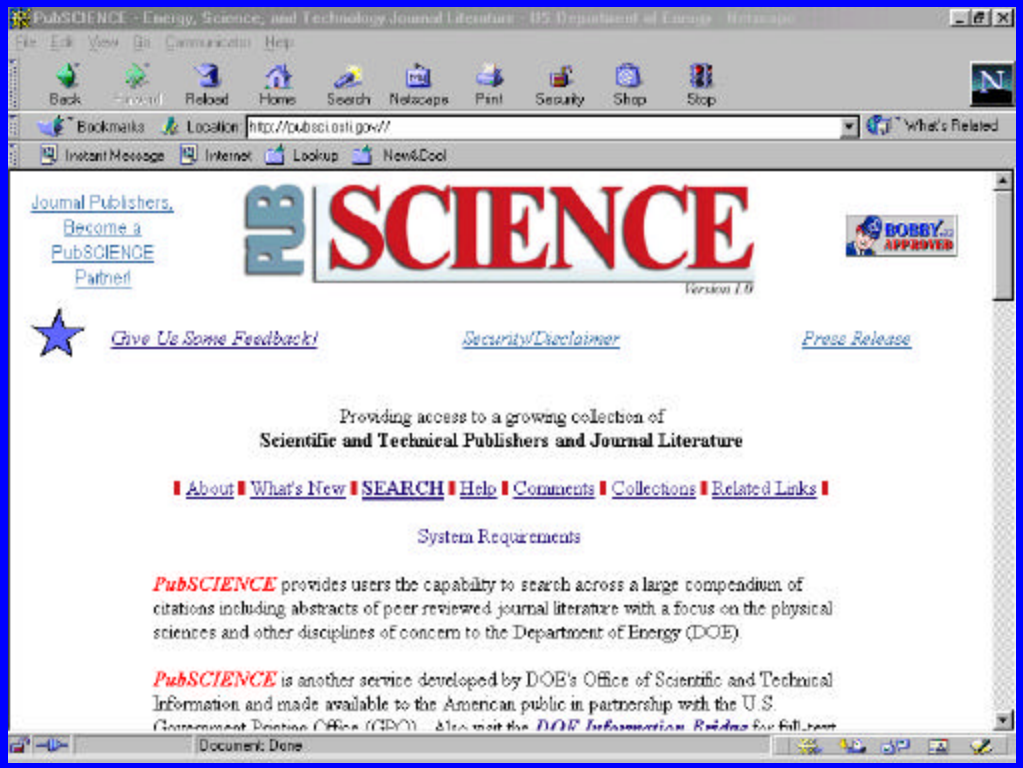
PubSCIENCE Future: An Evolution?



Journal Receipts

Goal

To ***double*** the FY01 receipts (1600) in FY02 (3200)

Status

To date, nearly half way through FY02, receipts (460) are at **25%** of the goal

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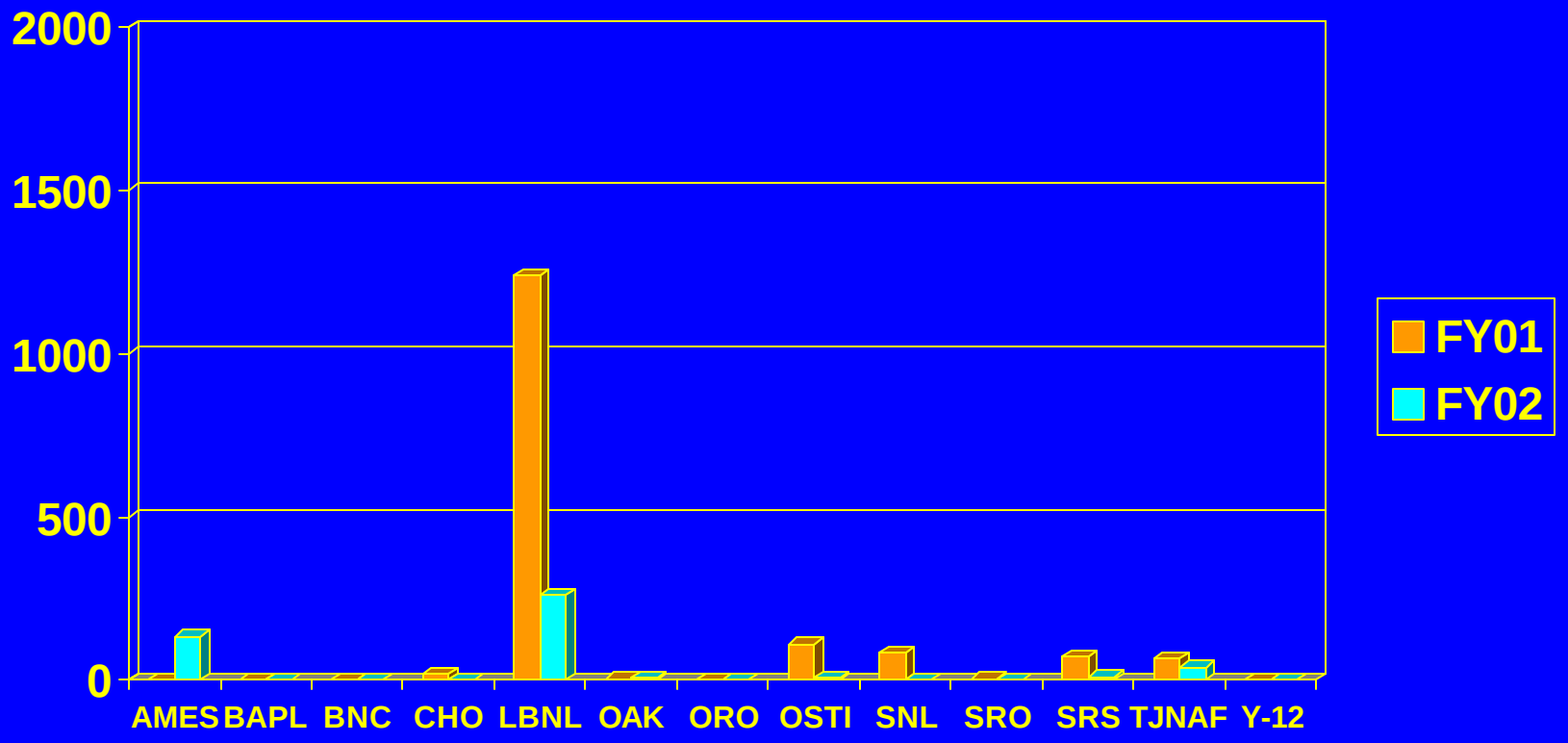
www.doe.gov

www.osti.gov

Journal Receipts



Journal Receipts

89% announcement citations only

11% full text (currently preprint & postprint)

Impact of New Journal & Preprint Definitions

Journal submissions to include only:

- citations
- full text

Preprints should be captured by the PrePRINT Network.

Harvesting

Harvesting Background:

- **OSTI continues to look at quicker and easier ways to acquire bibliographic and full text information**
- **Currently, DOE sites electronically "send" the bibliographic data and electronic full text**
- **Unclassified unlimited bibliographic information and full-text documents on DOE and contractor Web sites**
- **OSTI is using a distributed technology application to "harvest" STI**

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Harvesting

OSTI Proposes To:

- 'Harvest' a site's unclassified unlimited bibliographic information and map to Dublin Core metadata
- Incorporate the bibliographic information into the OSTI System (repository)
- Link to the associated electronic full text located at the site
- Make harvested bibliographic information, with links to full text, available on the Energy Citations Databases and other appropriate OSTI Web products

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Utilization of the OSTI Data Harvesting Application

- **EH, Office of Environmental Policy and Assistance**
  - Served as harvesting prototype
  - Small database (approximately 1,000)
  - Limited number of EH database fields (21)

- **National Renewable Energy Laboratory (NREL)**
  - Served as first test site
  - Large database
  - Large number of NREL database fields (86)

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Benefits of Harvesting

- Capitalizes on the work already done by sites
- Minimizes additional operational requirements for the sites
- Simplifies and accelerates submittal of unclassified, unlimited STI
- Decreases the processing and/or forms input required by DOE sites
- Increases the timeliness of announcement of STI to both DOE and public users
- Minimizes storage requirements for the Department
- Supports Departmental interest in maintaining a centralized collection of citations
- Decreases information management cost and improves information management efficiency

Harvesting

Lessons Learned

- Each site situation is unique
- A wide range of situations can be accommodated via harvesting
- Introductory documentation developed for site use
- Begin from the information management perspective while assuring technical requirements can be met
- Combination of information management and technical expertise assures success

Harvesting

Technical Implementation Requirements:

- An up-to-date metadata database for unclassified unlimited documents
- A record update (add/change) date field that facilitates metadata selection
- A unique record identifier in site's database
- Electronic full text corresponding to metadata harvested from the site must be referenced as a site URL in the harvested record
- An XML interface so that OSTI can access metadata via a URL with two parameters – start date; end date
- A site-developed XML interface must be available at the predefined "harvest time"
- A technical contact with which OSTI technical staff can communicate and interact

Harvesting

Implementation Steps:

- Identification of technical contact at DOE site
- Provision of name/labels for bibliographic database fields, definitions for each field, and sample records to OSTI
- Mapping of site's records to Dublin Core by OSTI
- Creation of output XML file by site
- Activation of the OSTI Data Harvester System
- Periodic evaluation of program by OSTI and site