



WORLDWIDESCIENCE.ORG

The Global Science Gateway

How Does WorldWideScience.org Work?

WorldWideScience.org uses federated search to provide its encompassing coverage of global science and research results. Unlike some popular search engines that only search the surface web, **WorldWideScience.org** drills down into the deep web, which contains a vast amount of scientific and technical information. For the first time ever, **WorldWideScience.org** also provides equal access to science across language barriers through the use of complex translations technology.

With federated search and translations technologies, **WorldWideScience.org** allows the user to search multiple data sources with a single query from the user interface. When the user enters a query in his/her preferred language in the search box, the query is translated and sent to every individual database or portal searched by **WorldWideScience.org**.



The individual databases and portals send back a list of results from the search query. **WorldWideScience.org** then ranks the hits from all the sources in relevance order, giving the user the option to translate each page of results. The user can review this hit list and travel to the host site of a particular hit for more detailed information such as the bibliographic citation, abstract, and in many cases, the full text of the document.

Multilingual **WorldWideScience.org** enables real-time searching and translations of globally-dispersed scientific literature. Users can search non-English databases and have search results translated into one of the ten languages currently supported (Arabic, Chinese, English, French, German, Japanese, Korean, Portuguese, Russian, and Spanish). Conversely, native speakers of these languages now have unprecedented access to English content. Multilingual translations are powered by Microsoft Translator.

WorldWideScience.org offers other key advantages when compared to existing crawler-based search engines. For instance, since searches occur in real time, the results are as current as the individual databases and portals themselves. Additionally, **WorldWideScience.org** does not place any requirements or burdens on owners of the individual data sources, other than handling increased traffic.



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For more information contact: **Lorrie Johnson** at JohnsonL@osti.gov