

A Global Science Gateway

by Wendy Warr

WorldWideScience.org is a global science gateway connecting researchers to national and international scientific databases and portals in such fields as energy, medicine, agriculture, environment, and basic sciences. Much of the information is in the public domain. The gateway enables anyone with Internet access to launch a single-query search of 375 million pages of scientific and technical information in more than 40 databases and portals from more than 50 countries, covering 6 continents and three quarters of the world's population. This information is not typically accessible through popular search engines. WorldWideScience.org is a powerful tool for enhanced scientific communication. It is intended to accelerate international scientific progress by serving as a single, sophisticated point of access for diverse scientific resources and expertise from nations around the world.

Popular search engines, such as Google, generally cannot search in the deep web where most research is found. The deep web is huge: Some experts estimate that it is more than 500 times the size of the surface web, where popular search engines operate. Federated search tools <www.osti.gov/fedsearch> are necessary to access the deep web. WorldWideScience.org provides federated searching, allowing an information patron to search multiple data sources with a single query from the user interface. When the user enters a query in the search box, the query is sent to every individual database or portal searched by WorldWideScience.org. The individual data sources send back lists of results from the search query, and WorldWideScience.org then ranks all the hits in order of relevance. The information patron can review this hit list and travel to the host site of a particular hit for more detailed information. In one query, users can search multiple databases at one time, sort through the information in various ways, and obtain relevant results on the desktop in a matter of seconds.

Federated searches are inherently as current as the individual data sources, as the sources are searched in real time. By default, the hits are displayed in rank order, but they can be sorted by other parameters. An Advanced Search option is also offered, allowing searches of combinations of databases and in

specific fields. WorldWideScience.org relies on federated search technology provided by Deep Web Technologies of Santa Fe, New Mexico <www.deep-webtech.com>.



Representatives from some of the 38 countries that signed the WorldWideScience Alliance Agreement in Seoul, Korea, on 12 June 2008.

WorldWideScience.org was modeled after Science.gov <www.science.gov/about.html>, the U.S. gateway to major government science information. The global gateway was developed and is maintained by the Office of Scientific and Technical Information, an element of the Office of Science within the U.S. Department of Energy. The WorldWideScience Alliance <<http://worldwidescience.org/alliance.html>> provides the governance structure for WorldWideScience.org.

The seeds of the alliance were sown in January 2007 in London, when Raymond Orbach, U.S. undersecretary for science, and Lynne Brindley, chief executive of the British Library, signed a statement of intent to create an international gateway. Since then, a multilateral partnership has been formed to provide a geographically diverse, long-term governance structure. The transition to multilateral governance began in June 2007 at the International Council for Scientific and Technical Information (ICSTI) General Assembly in Nancy, France. On 12 June 2008, officials from 11 organizations representing 38 countries gathered at an ICSTI meeting in Seoul, South Korea, to formalize their commitment to sustain and to build upon the online gateway to the world's science information. In October 2008, the People's Republic of China became the most recent nation to join the alliance. The Institute of Scientific and Technical Information of China, a component of the Chinese Ministry of Science and Technology, will represent the country. In addition to the member countries of the alliance, ICSTI will serve as a member and primary sponsor for WorldWideScience.org. Other nations are invited to participate.

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 <http://worldwidescience.org>

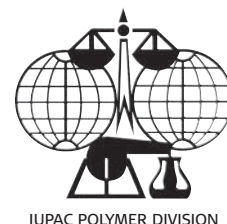


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The Executive Editors of **Polymer International** and the **IUPAC Polymer Division** are proud to announce the second award for creativity in applied polymer science or polymer technology. This award celebrates the achievements of young researchers in the polymer community.

The award will be presented at the **IUPAC World Polymer Congress – MACRO 2010**, 11-16 July 2010 in Glasgow, UK. The winner will be awarded **US\$ 5,000** plus travel and hotel accommodation expenses to attend MACRO 2010, where he/she will present a keynote lecture. The winner will be selected by the Scientific Committee, representing Polymer International and the IUPAC Polymer Division after 30th November 2009.

Please send your nominations by email to
Polymer International: polyint@wiley.com
before 30th October 2009.



Nominees must be aged under 40 years on 31st December 2010, and must be available to present a keynote lecture at MACRO 2010.

Please include the following information in your nomination:

- ▶ Your name and address
- ▶ Full name and date of birth of nominee
- ▶ Business address of nominee
- ▶ Nominee's academic background and education (college or university, location, major field, degree, year awarded)
- ▶ Nominee's employment history (position, organization, duties, dates)
- ▶ Nominee's publications, patents, unpublished reports, papers presented at meetings (please include a list of those you deem pertinent)
- ▶ Nominee's Honor's and awards
- ▶ Scientific achievements for which the candidate is nominated for this award
- ▶ Self nominations will not be accepted

For further details please go to:
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