



Sigma Xi International Newsletter
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This monthly electronic bulletin is designed to keep subscribers updated on developments in Sigma Xi's international activities and to provide links and topics of interest to researchers around the world. To submit an item to the newsletter, send an e-mail to international@sigmaxi.org. You can also read this newsletter online at:
<http://sigmaxi.org/programs/international/newsletter.shtml>.

European Union Plans to Facilitate Research

In an effort to become "the most competitive and dynamic knowledge-based economy by 2010," the European Union (EU) continues to introduce new initiatives under the European Research Area (ERA). The EU projects that its goal to increase research and development spending to a level of 3% of the gross domestic product (GDP) by 2010 will create a need for more than 600,000 new researchers. The "Marie Curie Actions" comprise a comprehensive program to address the mobility and training of researchers and attract international talent, thereby decreasing European brain drain and meeting the anticipated need for additional researchers.

On 30 June, the European Network of Mobility Centres (ERA-MORE), made up of more than 200 centers, was officially unveiled. These centers offer free assistance to researchers in all aspects of their professional and personal lives, providing practical information on vital topics such as housing, work permits, health care, taxes, schooling, day-care and language courses. A pan-European Researcher's Mobility Portal launched in 2003 (see <http://europa.eu.int/eracareers>) also offers valuable information online.

In addition, the European Commission is moving towards the creation of a special residency permit for researchers coming from outside the EU. Not only will this permit allow the non-EU researcher to move freely within the EU, but it also will not require the applicant to return to his/her home country in order to renew it. The permit will cover fellowships, scholarships, and traineeships for "qualified individuals in the knowledge and innovation process." Hosting organizations will be required to certify applicants' eligibility, and an expedited process will require authorities to issue the special residency permit within 30 days of application submission. The officials at the EU Research Directorate-General are well-aware

of the timeliness of these measures and hope to capitalize on the recent mobility difficulties international researchers have been experiencing, particularly when trying to enter the US. [Sources: *RTD info*; <http://snipurl.com/7p85> and *Marie Curie Actions Web site* <http://snipurl.com/7q67>]

Career Resources

Looking for a career change? Helping students or young researchers investigate different professions or navigate their career paths? There is a lot of free information available on the Internet, and here we profile a few useful sites for students and professionals. Unless otherwise specified, the sites are in English.

Career InfoNet <http://www.acinet.org>
a comprehensive US government site detailing occupational requirements, wages, trends, and an extensive career resource library

Careers & Transitions <http://snipurl.com/7s4c>
from Australia's Department of Engineering, Science and Training; geared toward multiple audiences, from students to professionals

Carreras.co.cr <http://www.carreras.co.cr>
gives career descriptions, tips for choosing a career and some universities in Costa Rica where you can study those fields; *in Spanish*

Enginuity <http://www.enginuity.org.uk>
an engineering career site for students from the UK's Sector Skills Council for Science, Engineering and Manufacturing Technologies (SEMTA)

EURES <http://europa.eu.int/eures>
the European Job Mobility Portal; information on jobs and learning opportunities in Europe; *in all EU languages*

Jobs, Workers, Training & Careers <http://www.jobsetc.ca>
Canadian government page listing many resources
for jobs, training and all stages of career exploration;
in English & French

LesMetiers.net <http://www.lesmetiers.net>
extensive multimedia site covering more than 400
different professions; created by the Regional Council
of Ile-de-France for students 12–25 years old; requires
Flash 7 plug-in; *in French*

Next Wave <http://nextwave.sciencemag.org>
career development resource for scientists from
Science with portals specific to Australia, Canada,
Germany, the Netherlands, the UK and the US

*O*NET OnLine* <http://online.onetcenter.org>
the US Department of Labor's Occupational
Information Network; can find job titles either by
keyword or by matching with the required skills; lists
very thorough profiles on each profession

L'Onisep <http://www.onisep.fr>
career planning site for students from France's
National Office of Information on Education and
Professions; *in French*

Sloan Career Cornerstone Center
<http://www.careercornerstone.org>
geared toward US students but contains a lot of gen-
erally applicable information on job descriptions,
personal profiles, and networking for science, mathe-
matics and engineering

Studien- & Berufswahl (STUB) <http://www.studienwahl.de>
federal German career-planning site with decision-
making aids, courses of study and occupational
descriptions; *in English, French and German*

Teaching Resources-Careers <http://snipurl.com/7r5k>
compilation of links by UniServe Science (University
of Sydney) for a multitude of different science-related
careers

Universaria.net <http://www.universia.net>
portal connecting more than 700 universities in
Argentina, Brazil, Colombia, Chile, Mexico, Peru,
Portugal, Puerto Rico, Spain and Venezuela; *in*
Basque, Catalan, English, Galician, Portuguese, and
Spanish



George Golitsyn (l) & Jim Baur (r) at the inauguration

Sigma Xi Installs International Partner in Moscow

In May, the Society heightened its international presence with the installation of the Sigma Xi Moscow International Partner. Georgii Alexandrov, Alexander Ginzburg, George Golitsyn, Vladimir Krapivin, Alexander Semenov and Alexei Stepanov worked together to organize a Rally of Scientific Schools last year and also to recruit members for the International Partner. This was the second such group to be formed, the first being Sigma Xi Georgia in Tbilisi. Jim Baur, former chair of Sigma Xi's International Committee, presided over the inauguration at the Institute of Atmospheric Physics of the Russian Academy of Sciences. At the ceremony, the new group expressed their appreciation to the Sigma Xi Alaska Chapter for a check covering the initiation fee. The International Partner designation enables a group to set and collect annual dues in their local currency in countries where the cost of membership dues in US dollars would be prohibitive. For more information on Sigma Xi International Chapters and International Partners, see <http://snipurl.com/7tc9>.

Search Engines Increasing Visibility of Scholarly Work

Until recently, much of the material in scholarly archives was not indexed by commercial search engines, so these valuable sources of information were largely "invisible" on the Internet. Both Google and Yahoo have embarked upon multiple collaborative projects aimed at increasing the quality of information returned in their respective search results. For example, Google is working with the Massachusetts Institute of Technology and the other

institutions that use DSpace, an open source digital repository system, to index the content of their digital archives. They are also collaborating with the Online Computer Library Center on the Open WorldCat pilot project to make libraries and their collections more visible to the average Internet user. In March 2004, Yahoo launched its Content Acquisition Program, through which content providers directly submit their Web pages for inclusion in Yahoo's search index. Yahoo's non-commercial Public Site Match division is working with OAIster to index their collection of freely available, difficult-to-access, academically oriented digital resources. Other content providers collaborating with Public Site Match include the US Library of Congress, the US National Science Digital Library, the OYEZ project, and the Cuneiform Digital Library Initiative. These search engines are not only concerned with freely available scholarly information but are also indexing commercially available information such as journal articles. Google recently finished indexing the full-text of Ingenta's electronic journal collection and is currently indexing Extenza's electronic journal collection. The company is also a partner in the CrossRefSearch Pilot, which searches the full-text of the 25 participating publishers and links directly to the articles when possible. [Source: *Chronicle of Higher Education*; <http://www.chronicle.com>]

New Speech Synthesizer Developed for the Physically Challenged

A new open source software program called eLocutor enables people with severe physical disabilities to use computers to create words and sentences. Originally designed by Mumbai-based Net Radiophony India for renowned physicist Stephen Hawking, the software uses the input from a single button to select words, form sentences and edit text. This is an important development because current speech synthesizer software is not open source and therefore does not openly show the program code, making software modification impossible. The previously available speech synthesizer software also did not work well with special-purpose pointing devices. Radiophony continues to refine new versions of eLocutor based on Windows, GNU/Linux and MacOS operating systems, and it is free to download from their Web site (<http://radiophony.com>). [Source: *Digital Dividend Digest*; <http://snipurl.com/3taw>]

Israeli-Palestinian Science Organization Founded

With a stated mission to rekindle, foster, and fund scientific cooperation and scholarly endeavors between Israelis and Palestinians, the Israeli-Palestinian Science Organization (IPSO) was established this past April. The organization's beginnings can be traced back to 2002 when the founders, Professors Sari Nusseibeh of Al-Quds University in East Jerusalem and Menahem Yaari of The Hebrew University of Jerusalem, participated in a UNESCO roundtable on Science and Peace. This was the first in a series of meetings exploring new ways to foster Israeli-Palestinian academic and scientific cooperation. IPSO has been endorsed by more than 20 academies of science and will be governed by an International Scientific Council of 14 members. Initial funding for the project is coming from the Andrea and Charles Bronfman Philanthropies, the Rothschild Foundation and the US National Academies of Science. [Source: *A World of Science Newsletter*; <http://www.unesco.org/science/>]

Web Inventor Receives Millennium Technology Prize

Last month, Tim Berners-Lee received the €1,000,000 Millennium Technology Prize from the Finnish Technology Award Foundation for conceiving of the World Wide Web when he worked at CERN, the European Laboratory for Particle Physics near Geneva. It is particularly appropriate that Berners-Lee would receive the world's largest technology prize, finally receiving financial compensation for a groundbreaking concept that he and his colleague, Robert Cailliau, refused to patent. The prize, awarded for "outstanding technological achievements that raised the quality of life," is supported by the Finnish government and private contributors. [Source: *Open Access News*; <http://snipurl.com/3tay>]

Did You Know?

The European Research Consortium for Informatics and Mathematics (ERCIM) provides financial support for workshops and summer schools co-organized by one of the 18 ERCIM member institutes. The deadline for applications for sponsorship is 10 August 2004 for workshops and summer schools held no earlier than 15 October 2004. The application form and program details are available online: <http://snipurl.com/7qjx>.

The Stockholm Water Foundation has issued a call for nominations for the **2005 Stockholm Water Prize**. This prize, consisting of a crystal sculpture and US\$150,000, is awarded annually to an individual, institution or organization for outstanding activities that broadly contribute to the availability, conservation and protection of the world's water resources. Nominations must be submitted on the official nomination form and mailed by 30 September 2004. More details are available on the Stockholm International Water Institute's Web site, <http://www.siwi.org>.

Canada's International Development Research Centre (IDRC) offers a number of fellowship programs such as the **Bentley Fellowship** for the use of fertility enhancing food, forage and cover crops in sustainably managed agroecosystems. Students and researchers with degrees in agriculture, forestry or biology who wish to undertake applied research on a farm in a developing country can apply to receive the CDN\$30,000 annual stipend. The deadline for applications is 1 October 2004. For complete details, see: <http://snipurl.com/7qf5>. [Source: *SciDev.Net*; <http://www.sciddev.net>]

Euroscience's Rammal Award was created to recognize outstanding individuals of strong scientific stature from the Mediterranean countries who have elevated the level of scientific exchanges in the region through their fundamental or applied research, teaching, and/or integration of knowledge. Short introductions and contact information for candidates should be submitted prior to 1 October 2004. More information is available online: <http://snipurl.com/7qjj>.

Researchers from academic and research institutions of the Food and Agriculture Organization (FAO) member nations are eligible to apply year-round for

FAO's Visiting Experts Program. Through the program, distinguished scholars and researchers who meet critical intellectual and analytical needs in FAO's priority programs can work with FAO for up to one year. FAO also administers the **Young Professionals, Retired Experts and Experts for Technical Cooperation** programs, which all address the most pressing issues related to hunger, food security and rural development. Information for all of these programs can be found at:

<http://snipurl.com/7qli>. [Source: *Global Development Network*; <http://snipurl.com/7qlk>]

Upcoming Meetings

World Water Week; Stockholm, Sweden; 16–20 August 2004

<http://www.siwi.org>

EuroScience Open Forum 2004: Highlighting Science, Technology & Innovation in Europe; Stockholm, Sweden; 25–28 August 2004

<http://www.esof2004.org>

Monitoring Science & Technology Symposium: Unifying Knowledge for Sustainability in the Western Hemisphere; Denver, Colorado, US; 20–24 September 2004

<http://www.monitoringsymposium.com>

4th World Conference of Science Journalism; Montréal, Canada; 4–8 October 2004

<http://www.wcsj2004.com>

International Association for the Development of the Information Society (IADIS) WWW/Internet 2004 Conference; Madrid, Spain; 6–9 October 2004

<http://www.iadis.org/icwi2004/>



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