

## Science and the Information Society

In the opening line of his Editorial “A Challenge to the World’s Scientists” (*Science*, 7 March 2003, p. 1485), United Nations (UN) Secretary-General Kofi Annan states that “Science has contributed immensely to human progress and to the development of modern society.” He acknowledges that “Recent advances in information technology, genetics, and biotechnology hold extraordinary prospects for individual well-being and that of humankind as a whole.” But the real challenge he puts to the scientific community is this: “[Y]our advocacy can help bring about a breakthrough in access to scientific knowledge . . .”

As scientists, most of us probably take such views on the value of science for granted, but this is not necessarily the case for our political leaders, nor for society as a whole. Thus, Kofi Annan’s challenge is one to which the international science community needs to respond forcefully. The World Summit on the Information Society (WSIS), which will take place in Geneva, Switzerland (December 2003), and Tunis, Tunisia (2005), provides an unprecedented opportunity for the scientific community to promote the importance of open access to scientific knowledge to world leaders and thereby demonstrate that we are indeed “an indispensable partner of the United Nations.”

The International Council for Science (ICSU) and its Committee on Data for Science and Technology (CODATA) are working with other international science organizations to ensure that the crucial role of science in the development and use of information and communication technologies (ICTs) is clearly recognized in the formal declarations that come out of the WSIS. Scientific knowledge carries enormous potential for helping the world address the UN Millennium Development Goals, and the use of ICTs opens up unprecedented opportunities to accelerate this process. At the same time, scientists and governments must work together to eliminate, not widen, the “digital divide”: the division between rich and poor, North and South.

After an international workshop hosted by UNESCO (Paris, March 2003), ICSU and CODATA developed a joint position paper and agenda for action entitled “Science in the Information Society,” which can be found at [www.icsu.org](http://www.icsu.org). This agenda for action emphasizes the importance of strengthening the public domain for scientific data and information, and ensuring that the necessary policies and infrastructure are in place to enable universal and equitable access to this invaluable resource. The agenda for action has now been formally endorsed by many national science academies and international science organizations around the world.

A special intergovernmental intersessional meeting for WSIS took place in early July 2003 in Paris to refine the draft declaration of principles and plan of action that heads of state will be asked to endorse at the summit in Geneva in December. Several governments, in particular Switzerland, France, and Romania, have embraced the messages from the science community, and science now features in the revised draft declaration. However, there were strong pleas from both the commercial sector and sympathetic governments to strengthen intellectual property rights and copyright regimes even further. Although no one appears to be strongly opposed to the principle of open and equitable access to scientific data and knowledge, that value can easily be relegated to a secondary position relative to short-term commercial interests. Hence, it is crucial that the science community continue to promote the societal benefit of widely shared scientific knowledge. The next preparatory meeting for the WSIS is in Geneva from 16 to 26 September. Our goal is to ensure that science continues to feature strongly in the final drafts of the formal summit documents expected to emerge from that meeting.

The “Science in the Information Society” agenda for action was a starting point. Getting science into the draft governmental documents in July was a significant step forward. What is now needed is for scientists around the world to take up this agenda for action, discuss it, and adapt it where necessary—but most of all, present it to the national government delegations who will be making major decisions on the future of the information society this December. Kofi Annan will be in Geneva. We invite the scientific community to demonstrate its readiness to take up his challenge by championing universal and equitable access to scientific knowledge.

**Jane Lubchenco and Shuichi Iwata**

Jane Lubchenco (Oregon State University) is president of ICSU; Shuichi Iwata (University of Tokyo) is president of ICSU’s CODATA. ICSU and CODATA are based in Paris, France.

