Sunny San Diego Hosts 2006 AESE Meeting

Meg Smath

The Association of Earth Science Editors (AESE) gathered in November to explore the theme "Science under Fire". As Program Chair Fred Spilhaus noted, "Most do not understand science or the scientific process. We face efforts to dilute science education, attacks on scientists and their work by legislators and others who don't like the results, mandates to provide free access to published papers, government restraints that make teaching more difficult, restrictions that inhibit teaching, travel, and communication in science." The presentations at this meeting explored ways of enhancing earth science and countering external threats.

Technical Session 1, chaired by Spilhaus, led off Thursday morning, 9 November, and discussed challenges that today's environment for science presents to scientists and editors alike. John Geissmann, of the University of New Mexico and chair of the Geological Society of America (GSA) Publications Committee, recommended that scientists teach prospective science teachers how to teach science. Arizona State Geologist Lee Allison discussed the Kansas Board of Education's hearings on evolution and the successful strategy adopted by Kansas Citizens for Science to boycott the hearings. GSA Executive Director Jack Hess and John Keith, of the US Geological Survey (USGS), joined in a panel discussion.

Session 2, "Management's View of Publications", was chaired by Karen MacFarlane. Carolyn Relf, of the Northwest Territory Geoscience Office, spoke on "Distributing Geoscience Information in the Early 21st Century: NWT's Experience". She described how the office delivers papers, maps, reports, and tabular data to its target audience of geoscientists over the Web. Ed Swibas, of USGS, talked about SmarTeam, a "document management system for integrating science, publishing, metadata, and workflows". The IBM system is customized for USGS's needs and tracks publications across USGS's four divisions, ensures uniform review and approval processes, and provides a system to describe and reinforce workflows. Fred Spilhaus, as executive director of the American Geophysical Union (AGU), gave a different perspective, that of a society. AGU publishes 2 dozen journals, many with extremely fast turnaround. Rex Buchanan, associate director for public outreach at the Kansas Geological Survey (KGS), complemented Spilhaus's presentation with his talk on the state survey perspective.

Thursday afternoon was occupied by a natural-history field trip to San Diego Bay and Point Loma. We saw the bay in style on a dinner cruise, with geologic tour guide Monte Marshall, of San Diego State University.

Friday's technical sessions began with "Innovations in Science Communication", chaired by Mindy James and Rex Buchanan. Meg Smath spoke about "Reaching Out through the Web: RSS and Podcasts at the Kentucky Geological Survey". The new Web offerings allow KGS to reach an audience it hadn't even known was there. Statistics demonstrate that immediately after one podcast was released, the number of hits to a referenced site jumped by over 300%. Linda Zellmer, of the Indiana University Geology Library, spoke on "Improving Access to Digital Geoscience Information". She noted that as electronic publications are becoming more common than print publications, locating the information is increasingly difficult. Web search engines sometimes cannot locate information because of how it is presented on Web sites. Kim McDonald, director of science communications at the University of California, San Diego (UCSD), spoke on "Communicating Science Directly to the Public". At UCSD, advances in information technology have allowed science public-relations professionals to communicate their research stories directly to the public. That has not only helped researchers to fulfill their outreach obligations but also served as a source of funds to support the efforts in the face of declining budgets for outreach and communication.

Session 4, "Publishing Today and Tomorrow", was chaired by Carol Christopher. Tom Overton, of the Gemological Institute of America, spoke on "Using Back Issue Content to Create a New Book Series". The journal *Gems & Gemology* has been published since 1934, and many back issues are long out of print. The institute created a new book series, *In Review*, in which articles on a particular subject are compiled into a single volume. The first volume covered synthetic diamonds; the second, colored diamonds; and a third, on diamond treatments, will be released in early 2008. Jack Hess, of the GSA, spoke on "GSW and the Future". GSW, or GeoScience World, is a comprehensive Web resource for research and communication in the geosciences built on a core database aggregation of peer-reviewed journals indexed, linked, and operating with GeoRef. Its purpose is to make geoscience research and related information easily and economically available through the Web. Launched in February 2005, it covers 30 journals from 22 publishers in six countries, and it ended its first two fiscal years in the black. It is striving for increased search functionality, a Google Map interface, balanced coverage of geoscience disciplines, and addition of books, maps, and international and regional society journals. Judy Holoviak, of AGU, discussed "Economic Models, Open Access, and Other Challenges", in particu-

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lar how these topics affect society journals. The session ended with Hubert Staudigel, of Scripps Institution of Oceanography, speaking on "Publishing within a Cyber-infrastructure for Earth Science and Education". Cyber-Infrastructure is a national reliable, dynamic, interoperable, and integrated system of hardware, software, and data resources and services. It aims to open the door to new types of scientific research, engineering, and education.

After the annual business meeting and luncheon, Friday's sessions continued with "Exploring Issues Related to the Accessibility of Data and to the Publishing and Archiving of the Records of Science", chaired by Holoviak. Linda Guay and Alison Klingbyle, of Natural Resources Canada, discussed "GeoPub: Information Access for Everyone". This Web portal for free downloads of earth-science publications was launched in January 2005 and contains information from the Geological Survey of Canada and the Canada Centre for Remote Sensing. It contains more than 1500 publications, and more are added every month. Close to 18,000 downloads as of 1 October 2006 have been mainly from clients outside the federal government. Anthony Koppers, of the Scripps Institution of Oceanography, spoke next on "EarthRef.org within the Earth Science Cyber-Infrastructure". He cited the need to safeguard our scientific data legacy. The requirements for EarthRef.org, which has been online since 1999, were flexible access to data holdings, collaboration with domain experts, evaluation and control of data quality, and support of data analysis. In the future, the initiative would like to strengthen links between earth-science databases and publishers, establish incentives for scientists to publish more of their data, and establish standard data and metadata formats to be honored during review. Timothy Ingoldsby, of the American Institute of Physics (AIP), spoke on "Digital Archiving: Realities of Implementing an Archiving Policy". He explained what is meant by digital archiving and why it is important. He listed several archiving approaches, including the one AIP agreed to use, called Portico.

Session 6, "On the Public Understanding of Science", was chaired by Spilhaus. Roy Shlemon, co-editor-in-chief of *Engineering Geology,* discussed "Peer Reviews for Academic Journals: Challenges for the Editor-in-Chief". He noted that volunteer peer reviewers expect tangible and intangible benefits in exchange for their time and expertise. Editors and publishers must monitor reviewer quality and replace reviewers as necessary. Gail Wendt, of USGS, spoke eloquently on "The General Public: The Most Difficult Audience of All". She reflected on her many years of public service and shared "war stories" with the audience. Tom van Loon, of the Netherlands, discussed "European Efforts and Joint Ventures" and encouraged AESE to expand its outreach efforts through its Web site. Allison gave his second talk of the meeting, "A National Campaign to Improve the Public Understanding of Science"; described the Committee on the Public Understanding of Science (COPUS), an initiative of several organizations, including the American Institute of Biological Sciences, the General Services Administration, and the National Science Foundation; and presented several models for improving the public's understanding of science.

The banquet on Friday evening featured after-dinner speaker Pat Abbott, professor of geology at San Diego State University, who spoke on "The Rise and Fall of San Diego: 150 Million Years of History Recorded in Sedimentary Rocks".

The meeting wrapped up on Saturday morning with two sessions. Session 7, chaired by Lisa Pinkser, was a panel discussion on ethics. Pinkser and panel members Holoviak and van Loon shared ethical issues they had dealt with.

Session 8, a summary and wrap-up, was chaired by Spilhaus. After his comments about how we, as editors and members of the scientific community, can make a difference, Rowena Mills, of the Society of Exploration Geophysicists, gave a personal wrap-up. The meeting ended with a panel discussion, featuring the past presidents of AESE, on what AESE should do now to enhance the image of the earth sciences and the value of the information entrusted to us.

The 2007 meeting is planned for Canada in early autumn. Please join us! Visit *www.aese.org* to learn more about the organization.