## Report on TOS Meeting in Paris, June 1 - 4 1998

Melbourne G. Briscoe

Office of Naval Research • 800 N. Quincy Street • Arlington, Virginia 22217 USA

## I Love Paris

(with apologies to Cole Porter)

I love Paris in the springtime,
I love Paris most of all,
I love Paris for the science, at UNESCO,
I love Paris at TOS meetings, where the best go,
I love Paris and the ocean,
Ocean science is so fair,
I love Paris,
Why, oh, why do I love Paris,
Because our TOS is there.

he Oceanography Society is an international society, with approximately one-quarter of its membership from outside the United States. One of the strategic goals of TOS is to increase its non-North American membership, in recognition of ocean science as a topic that knows no national boundaries and consistent with the interdisciplinary and inclusive nature of the subject.

To this end, the 1998 Annual Meeting of TOS was held in Paris, jointly sponsored by the Intergovernmental Oceanographic Commission (IOC) of the United Nations Educational, Scientific, and Cultural Organization (UNESCO). IOC (see http://www.unesco.org/ioc/) has 125 member states, all on the ocean, and all interested in furthering the science of the ocean and its wise application to the use and conservation of the ocean, its boundaries, and its resources. The meeting was also co-sponsored by the American Geophysical Union (AGU), the American Meteorological Society (AMS), the American Society of Limnology and Oceanography (ASLO), the Canadian Meteorological and Oceanographic Society (CMOS), the Challenger Society for Marine Science (CSMS), and the Marine Technology Society (MTS). Of note is that over 60% of the speakers, chairs, and attendees were from non-North American locations.

The meeting co-chairs were Dr. Kenneth Brink from the Woods Hole Oceanographic Institution in Massachusetts, U.S.A., and Dr. Katherine Richardson from the University of Arhus, in Denmark. Full details of the sessions, speakers, abstracts, and posters can be found in this issue of *Oceanography*. In summary, the focus of the meeting was "Coastal and Marginal Seas," and the sessions were structured around Small Scale Processes, Medium Scale Processes and GOOS, Regional Scale Processes, and Policy and Late-Breaking Events. Each session was one half day.

Total attendance was 227 (including 14 students), what some call a small meeting, others call intimate. To encourage the student attendance, TOS offered half-price registration and abstract fees for students. In addition, the Office of Naval Research (ONR) and the National Oceanic and Atmospheric Administration (NOAA) provided travel support and hosted two groups of Mentor-Plus-Students from the University of Alaska (Fairbanks) and Texas A&M University (Corpus Christi); the students were Native Americans (U of AK) and Hispanics (TAMU).

One senior attendee commented afterwards to me that he wished he'd been able to go to a meeting like that when he was a young scientist, because during his early career he'd never had the opportunity to speak directly with so many famous scientists and actually have a chance to discuss things with them at a poster session of manageable size, or even go out to dinner with them. His words took me back to an International Association for the Physical Sciences of the Ocean (IAPSO) meeting on North Atlantic Variability that was held in Dublin in 1968, while I was a post-doc at the NATO SACLANT laboratory in La Spezia, Italy. It was a meeting of similar size to the TOS Paris meeting, and

had a similar number of international and recognized scientists present. It was a marvelous and exciting experience that helped shape my career, and it also introduced me to draft Guinness with Dublin Bay oysters and Irish brown bread slathered with butter; a terrific meeting.

Most of the presentations, posters, and graphics were excellent at the TOS Paris meeting, as is the usual high standard for TOS, although a few did not reach the mark. Back in 1987-88 when TOS was being formed, one of the strong motivations was to raise the standard of ocean meetings and to demonstrate by example how to give a good scientific talk and present a good poster paper. I have not met anyone who was at the first TOS meeting in Monterey in 1989 who does not remember vividly one or more of the talks by Munk, Stommel, Packard, or others. The excitement was palpable. Several of the TOS Paris presentations were of that high standard, for example:

- Mimi Koehl's lively talk on small-scale hydrodynamics of zooplankton will be remembered by all who were there, both for its content and for its presentation.
- Chuck Nittrouer's tour de force in describing the broad interdisciplinary work on the Amazon discharge was an exemplary demonstration of how to cover much without getting mired in details or in one's own favorite parts.
- We have been hearing about the Global Ocean Observing System (GOOS) for a decade now, without much apparent substance, but Neville Smith provided an intriguing, tractable, and important objective in the Global Ocean Data Assimilation Experiment (GODAE), while Nick Flemming gave clear evidence that EUROGOOS is actually happening, data are flowing, products are being produced, and the value of the research and observational investments are being realized.
- Patricio Bernal, the Executive Secretary of the IOC, challenged our thinking and complacency, with comments like, "The scientific agenda is being driven by society. We are not comfortable with this."
   Or, "We are a guild. We operate with our own rules of self-recognition and structure, as in a guild." And finally, to help explain his IOC, "Intergovernmental organizations try to give a structure to the demands of society, to try and develop good communication with the specialized guilds."

As I have pointed out in other meeting reports in *Oceanography*, people have really figured out how to prepare and present posters. At a TOS meeting, with only a few oral presentations, communication of one's science by use of posters is even more important. With the ready access to color graphics and large printers, however, it is more apparent than ever that a few of the posters have no point, no punch line, no conclusion, no

insights. Ocean sciences has always been plagued with papers that do no more than say "here is what I did and what I measured," and leave you hungry for why it was done, or what was learned, or what insights were gained, or how it fits together with other efforts and other data. Partly this has been a consequence of how very difficult it is to obtain quality data from the ocean, so simply having some to show was a major achievement. (I remember when one could publish the wiggly line from a current meter, because no one had seen one before...) We are beyond that, in most cases. The posters need to use the beautiful graphics to help show why the problem was tackled, and what the insights and lessons learned were, and why someone might care, and what comes next. I don't mean to imply the TOS Paris poster sessions were poor; quite the contrary. They were superb overall, which only meant that the posters that were lacking stood out more than usual.

I believe the TOS meeting format of long, invited, plenary talks designed for interdisciplinary audiences, combined with contributed posters designed for one-on-one interactions, proved itself again as a superb format for scientific communication within the broad topical areas of oceanography. Even though not every person attending has the opportunity to talk to a large audience, they all do have the opportunity to use a poster to display their work, and they have the opportunity to listen and learn about subjects outside their own specialities.

So was it a good meeting? My favorite criteria (in no special order) are:

- Did I learn something new? (Yes)
- Was I challenged intellectually? (Yes)
- Were the talks and posters of high quality and professional? (Yes)
- Did I meet some old friends? (Yes)
- Did I meet some new folks, whom I look forward to seeing again? (Yes)
- Was I able to press some issues/topics I care about on some people who seemed interested? (Yes)
- Was the food good? (Yes!!)
- Was the site interesting (Yes!)
- Am I glad I spent the time and money? (Yes!)

Others may have different criteria. But here is a quote TOS received afterwards: "The Paris meeting served as my first introduction to TOS. The meeting was indeed a major success. The quality of the talks and posters was extraordinary...I appreciated the opportunity to present [a poster] at the meeting and now that I am a member I hope to attend many more."

It was, in fact, a terrific meeting. The TOS Council plans to consider returning to Paris and UNESCO perhaps every three years, in a continued effort to remain an international society and to retain a bond with the IOC. I look forward to TOS Paris in 2001; I hope at least 500 people go the meeting, because there are at least 500 oceanographers who will find they are glad they spent the time and the money.