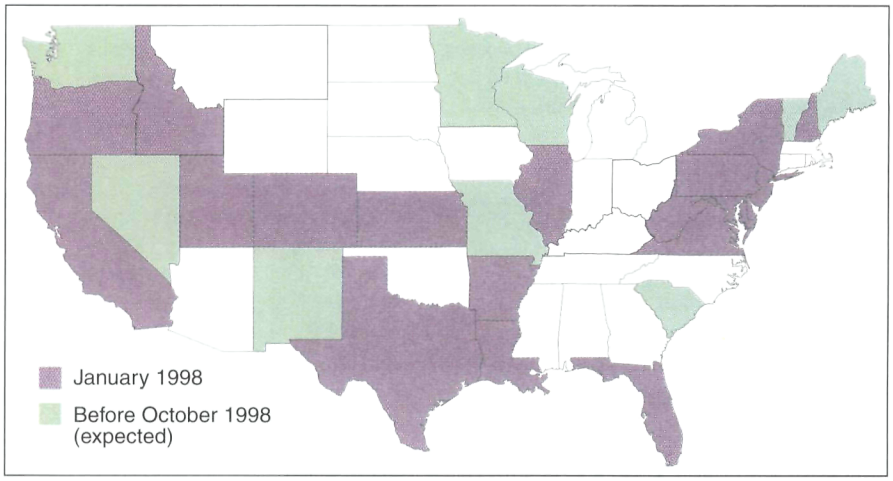
GOVERNMENT AND SOCIETY

NELAC moves forward

The National Environmental Laboratory Accreditation Conference (NELAC) held its third interim meeting in January to fine-tune the standards that were passed at the annual meeting last July. According to NELAC executive director Jeanne Mourrain, the standards involving personnel requirements, which did not pass at the annual meeting, have been revised. All changes will be voted on at the fourth annual meeting in June, in San Antonio, TX. "We expect to be well into implementation by the annual meeting," says NELAC chair Carol Batterton.



States applying for recognition as NELAC accrediting authorities.

The intent of NELAC is to provide a uniform set of standards, so that when a laboratory is accredited in one state it will not have to go through the complete accreditation process (inspections, proficiency testing, etc.) in other states to do business across state lines (*Anal. Chem.* **1997,** *69,* 588 A). Originally, this concept was referred to as "reciprocity", but concerns exist regarding the use of the term because for many states the word has a specific legal meaning. "If they are going to have reciprocity between states, then they are required to have letters of agreement between governors—it's gotten convoluted," remarks Batterton. The word "recognition" has been suggested as an alternative to reciprocity; however, the issue is still being discussed.

Nevertheless, a total of 20 state agencies have already applied for recognition as accrediting authorities by NELAC, and 9 more are expected to apply before October. These numbers are higher than anyone originally anticipated. The target date for recognition of the first class of accrediting authorities is scheduled for the fall. This plan could be delayed, however, because of the overwhelming turnout, explains Charles Brokopp, chair of NELAC's transition ad hoc committee. It is not known whether federal laboratories will apply for recognition as accrediting authorities under NELAC. The Environmental Laboratory Advisory Board has requested that the intentions of all federal agencies be made clear by the annual meeting.

An ad hoc committee was previously set up to explore the feasibility of establishing standards for sampling and field measurement. The committee has now asked to be upgraded to a standing committee; this request will be voted on at the annual meeting. "Way back in the beginning, when NELAC was created, we always said we were going to develop standards for sampling and field measurements, but it was put on the back burner while the laboratory standards were being developed," says Batterton. "Numerous questions came up during their committee meeting. There was a lot of concern about NELAC even developing sampling and field measurement standards. The board has asked the committee to prepare an options paper about how they see these standards being incorporated into NELAC." It has not been decided whether a separate chapter in NELAC's book of standards will be devised for the sampling and field measurement standards.

Some concerns have been raised regarding the compatibility of the quality systems chapter with a performance-based measurement system (PBMS) (*Anal. Chem.* **1996,** *68,* 733 A; **1997,** *69,* 716 A). "The quality systems chapter is meant to be a baseline—do this if the method doesn't specify anything else or [if] there is nothing else that you can turn to," explains Batterton. Some feel that the quality systems chapter is too prescriptive and may pose problems for PBMS. "The quality systems committee has been actively involved in the PBMS process. They don't see a conflict, and therefore we don't believe there is anything in the quality systems chapter that is going to be a hindrance to implementation of PBMS."

According to NELAC chair-elect, Ken Jackson, at past meetings there has been a lack of consensus among the offices within EPA. Realizing the differing personal opinions and differing positions from the various offices, Nancy Wentworth, director of the Quality Assurance Division of EPA, joined the Environmental Monitoring Management Council (EMMC) panel on laboratory accreditation as co-chair. Wentworth is stressing her commitment to work closely with all EPA offices to make sure that the agency speaks with only one voice. Jackson believes that this will help ensure cooperation between NELAC and the EMMC and EPA.

"Each time we meet, the standards get better and better," remarks Jackson. "When the first round of authorities comes on board, we will be putting theory into practice. The standards are not cast in stone—if there is a strong consensus to change them, they will be changed." Jackson will become NELAC chair following the annual meeting in June. He stresses that NELAC will move forward with strong support from all sides—including EPA, the states, and the private sector.

Britt Erickson

Report on curricular development

The report of the workshops to examine the curriculum in the analytical sciences has been published. The workshops were organized by Theodore Kuwana of the University of Kansas and were sponsored by

the National Science Foundation (*Anal. Chem.* **1997,** *69,* 16 A)

The report makes numerous recommendations for improvements in the analytical curriculum. In particular, it emphasizes a teaching method known as problem-based learning for the classroom, in which students work in groups, and advocates a project-based approach for the laboratory, in which experiments can run as long as an entire term.

According to the workshop participants, dissemination and implementation are the next steps. Kuwana says that his office is in the process of sending copies of the report to college and university chemistry departments. "We're trying to disseminate [the information] by sending out reports, giving talks at conferences, and organizing sessions or workshops," says Kuwana. In addition, the group hopes to put the report on the Web.

The group is seeking permission to organize workshops at the fall 1998 ACS meeting and the 1999 Pittsburgh Conference. Thomas Wenzel of Bates College will organize those workshops if they are approved. "A workshop that might in some way give some experience in how to implement this would be [helpful]," says Wenzel. "The hope is that we'll hold some short workshops for people, [in which they can] hear about the method and maybe practice it in a sense—just to get a sense of how you might use it and to see some of the materials that could be utilized."

Celia Henry

Highlights of report recommendations

- The academic community should develop context-based curricula that incorporate problem-based learning.
- More students should be offered hands-on learning opportunities, including undergraduate research opportunities.
- Universities should form partnerships with community schools to enhance K–12 science education.
- The analytical community should develop a list of appropriate technologies for faculty to consider using in classes and laboratories.
- Industries should form partnerships with educators in the analytical sciences.
- Those involved in undergraduate education should look for ways to share information about curricular reform.
- Everyone involved in analytical undergraduate education or who benefits from it should look for ways to fund curricular reform.

PEOPLE

Ben S. Freiser 1951–1997

Ben S. Freiser died of a heart attack on Dec. 30, 1997. Freiser graduated summa cum laude from the University of California–Los Angeles and earned a Ph.D. at the California Institute of Technology under the direction of Jack Beauchamp and George Hammond. Freiser achieved recognition at Caltech with the McCoy Award for outstanding research by a graduate student in chemistry. With a symmetry that Ben loved, he was awarded another McCoy Award for outstanding research in the sciences by a faculty member at Purdue, 20 years later. He received many awards recognizing his research achievements.

Freiser's scientific achievements lie in metal ion chemistry, which he studied using ion cyclotron resonance (ICR) MS. He was a brilliant experimentalist with an unerring instinct for selecting problems of significance. A major breakthrough in Freiser's research came in 1980, with the marriage of a laser ionization source to an ICR to generate and study the gas-phase chemistry of simple metal ions. Freiser made a splash in 1991 by generating and characterizing exohedral complexes of buckyball. Many of his colleagues remember his satisfaction with winning the Fresenius Award, which he promptly renamed the "Freiser genius award". He published 200 scientific papers and worked hard and productively for the long periods during which his health was poor.

Freiser influenced many people through his teaching. Six times he won Purdue's School of Science Top Ten Teachers Award. His general chemistry courses provided a stage that allowed full play for his humor and showmanship, as well as his erudition. His analytical chemistry course was a hit with students, and he was proud to borrow methodology from his father, Henry Freiser, who was teaching a similar course at the University of Arizona. Freiser was important to the group of people who worked with him on a daily basis in his laboratory. His research group, which includes some 50 current and former Ph.D. students, represents one of his legacies.

Ben loved life. He fancied himself as a drummer. He took art classes—characteristically choosing drawing from life. He was an extremely proud father who leaves two young daughters, Monika and Melissa, and his wife, Helene. Ben Freiser was excited by and deeply committed to his work, and his humorous memos, infectious grin, and scientific achievements endeared him to all who knew him.

R. Graham Cooks

1999 Division of Analytical Chemistry Awards

The ACS Division of Analytical Chemistry (DAC) seeks nominations for its 1999 awards.

Eligibility is not restricted to members of the division, and nominations for these awards may also come from non-DAC members.

The ACS Division of Analytical Chemistry Award for Distinguished Service in the Advancement of Analytical Chemistry is a newly established award that is sponsored by the Waters Corporation. This award is given to those individuals who, through professional service in activities such as teaching, writing, research, and administration, have substantially and uniquely enhanced the field of analytical chemistry. Because the purpose of the award is first and foremost to recognize distinguished service, eligibility is restricted to individuals whose contributions have not already been specifically recognized by another ACS Award or DAC Award.

The Award in Chemical Instrumentation, sponsored by Dow Chemical Co. Foundation, is given to an individual who has advanced chemical instrumentation and has achieved one or more of the following: developed unique instrumentation,