

Association Report: MACTLAC

MACTLAC—Supporting Liberal Arts Chemistry Faculty

by Mark Muyskens

This report describes the Midwestern Association of Chemistry Teachers in Liberal Arts Colleges—MACTLAC, as members fondly refer to it—which celebrates a 50th anniversary in 2002. The organization serves college chemistry teachers at more than 140 private undergraduate colleges in seven Midwestern states—Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, and Wisconsin. Its primary function is to provide a forum for discussing issues related to teaching chemistry and to support chemistry teachers through networking with colleagues. More than 7,000 chemistry teachers have attended its annual meeting hosted by a member school. In October 2002, MACTLAC celebrates its 50th anniversary at its annual meeting at Illinois Wesleyan University, Bloomington, IL.

Background

The association was founded in 1952 with the goal of supporting chemistry faculty at private liberal arts colleges in the Midwest. That remains its mission today. Early in the life of the organization a constitution and by-laws were established describing its purpose, membership, governance, and meetings.¹ MACTLAC's ability to continue its role for 50 years is due in large part to the fact that it is governed by an executive council comprised of officers elected from the membership and representatives from each of the seven states.

The executive council gives stability to the organization by ensuring that meetings are scheduled in advance, overseeing the finances needed to conduct meetings, and making adjustments to the expectations of meeting organizers such that the task of hosting a meeting remains a manageable one. The council maintains a list of duties required of the host institution,² which assists those who plan each annual meeting. Host schools are selected on a rotating basis from the western, central, and eastern sections of the seven-state region. This ensures that over a three-year period most members are close to at least one annual meeting. Faculty from schools in states that border the MACTLAC states are invited to participate in the annual meetings. All members receive an annual report allowing those who were unable to attend the meeting to get a summary of the proceedings.

Annual Meetings

The primary function of MACTLAC is to arrange for a single, high-quality gathering each year. The meeting is usually held during the host school's fall break in mid-October and normally runs from Friday noon through Saturday noon. It is designed to fit the schedule of a busy college chemistry teacher. During the meeting, attendees find a variety of ways to connect with colleagues, make new acquaintances, and be inspired with new information.

Besides plenary speakers, the meeting features organized discussion sessions, a poster session, a banquet, a small vendor exhibition, and several breaks between sessions where informal discussions thrive. Many members find the meeting energizing in part because its size is more manageable than that of a typical ACS national meeting. The meeting has also proved to be attractive for graduate students who are interested in college teaching careers.

"Chemistry in Time and Space" was the theme of the most recent meeting, hosted by the University of St. Thomas in October 2001. Three speakers gave plenary presentations related to the space theme although each focused on a very different aspect of the space-time continuum. William Jensen (University of Cincinnati) reviewed 600 years of chemistry, giving us perspective on our place as we enter the next millennium. Yorke Rhodes (New York University) gave us an introduction to the strange variety of molecules that exist in interstellar space. Michael Ward (University of Minnesota) took us to the nanoscale world and explained how to engineer crystals with flexible space inside self-assembled molecular frameworks.

A number of features of the meeting are attractive to young faculty, particularly in their first several years of teaching. The discussion sessions focus on a variety of topics including the traditional chemistry sub-disciplines. For example, a new faculty member in biochemistry who is trying to find out how NMR is being used in biochemistry lab courses can get ideas and information on resources from colleagues at the meeting. A regular feature of the meeting is a discussion group on undergraduate research with one or more representatives from the National Science Foundation, Research Corporation, the ACS-Petroleum Research Fund, or the Dreyfus Foundation. At the most recent meeting John Stevens from NSF and Larry Funke from ACS-PRF gave information and helpful tips to a group of 40 participants.

For the past dozen years, there has been a small vendor exhibition; 12 different companies exhibited in 2001. We try to include companies that have products that fit the interests of small college chemistry departments, for example, textbook and lab supply companies. One particularly good match is a small company that converts older permanent magnet NMR instruments to FT-NMR systems. Exhibitors pay a small fee to defray the costs of the meeting, although the bulk of the meeting cost is still covered by meeting registration and the nominal annual membership fee.³

Since the organization serves a variety of colleges, including many programs with three or fewer faculty, issues discussed at meetings include journal requirements on limited library budgets, online access to chemical literature and teaching online literature searching, and providing cost-effective access to *Chemical Abstracts*.

MACTLAC Facts and Figures

Membership: 411 members

Officers: president-elect, president, past president, secretary-treasurer, archivist, placement officer, and seven state representatives

First meeting: 1952, hosted by Monmouth College, Monmouth, IL

2002 meeting: October 18–19, 2002, hosted by Illinois Wesleyan University, Bloomington, IL

States served: Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, and Wisconsin

Web site: www.mactlac.org

Recent discussion topics: Teaching chemistry in specific disciplines; teaching non-majors chemistry; NMR across the curriculum; access to chemical literature; safety and chemical hygiene; distance learning; facilities renovation and construction; undergraduate research; combinatorial chemistry.

Recent workshop topics: Computer modeling, thermal analysis techniques, curriculum reform, microscale laboratory techniques.

Recent meetings

2001 University of St. Thomas, St. Paul, MN
Chemistry in Time and Space

2000 Taylor University, Upland, IN
Chemistry: 2000 and Beyond

1999 Augustana College, Rock Island, IL
Chemical Education over the 20th Century, What Have We Learned?

1998 Wartburg College, Waverly, IA
Chemistry in the New Millennium: Making the Transition

1997 Calvin College, Grand Rapids, MI
Environmental Chemistry in the Curriculum

Other Activities

Besides the annual meeting, the association provides a number of services to its members. MACTLAC established a placement service in 1964 that connects applicants with open positions. A Placement Officer, who is appointed by the Executive Council, coordinates this service. Over the past five years there have been about 50 positions listed by MACTLAC schools annually and about 70 applicants annually. Occasional ad hoc committees carry out other activities of MACTLAC. One of our proudest achievements is the significant role the organization played in establishing the current academic discount for access to the *Chemical Abstracts*. At present MACTLAC has two ad hoc committees: one is studying faculty teaching load hours and the

other the possible ACS certification criteria for chemistry departments with fewer than four faculty members.

Notes

1. The constitution and by-laws are available on the organization's Web site at www.mactlac.org. (accessed Apr 2002)
2. A list of duties for the host institution is also available at www.mactlac.org. (accessed Apr 2002)
3. In 2001 the meeting registration fee was \$15 and the annual membership fee was \$2.

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