

THE Central Arkansas



CHEMIST

The Newsletter of the Central Arkansas Local Section of the American Chemical Society

March 2006

About the Speaker:

Meeting

Monday, March 6, 2006

Location: Pryor-England Science and
Engineering Center
Room 113
Harding University
Searcy, AR

5:30 pm Dinner – Dixie Cafe
205 South Poplar St.
Searcy, AR
501-278-5200

7:00 pm Program
Dr. Ned Heindel
*“An Approach to Anti-Alzheimer’s
Therapeutics: Inhibitors of
Acetylcholinesterase”*

*To obtain driving directions, check the last page or
visit membership.acs.org/c/centralarkansas*

Dr. Ned Heindel’s Professional activities: President, American Chemical Society (Washington, DC), 1994; director, American Chemical Society (Washington, DC), 1985-1996; director; Council for Chemical Research, 1995-1999; Board Member, IUPAC-USA, 1995-2001; Board Member, Chemical Sciences Roundtable-National Academy of Sciences, 2001-present; director; Centcom Advertising, Ltd. (Westport, CT), 1987-95; trustee,



Northampton County Historical Society; 1989-present; trustee, Keystone Junior College (1975-89) trustee, Chemical Heritage Foundation (Board then Heritage Council), 1986-present; member, Journal Pharmaceutical Science board (to 12/90); member, Bioconjugate Chemistry board (to 12/03); chairman, Chemical & Engineering News board (1988, 1992-93: member 1994-95); consultant, Unimed Pharmaceuticals, Somerville, NJ, 1989-1995; consultant, Digestive Care, 1992-present; consultant, Bio-ProX, 1995-1997; consultant, DCV Pharmaceuticals, 1998-2000; consultant Serenix Pharmaceuticals, 1999-present; consultant, National Museum of American History, Smithsonian Institution, Washington DC; 1990-present; consultant, Air Products and Chemicals, Allentown, PA, 1991-present; consultant, Apollon Corp., Malvern, PA, 1992-1995. Education/Degrees: Lebanon Valley College, B.S. cum laude, 1959 (Chemistry/Math); University of Delaware, Ph.D., 1963 (Organic Chemistry); Princeton University, fellow, 1964 (medicinal Chemistry); Lebanon Valley College, honorary D.Sc. 1985; Albright College, honorary D.Sc., 1993. Experience:

instructor, University of Delaware, 1962-63; visiting fellow, Princeton University, 1963-64; assistant professor, Ohio University, 1965; assistant professor, Marshall University, 1964-66; assistant, associate full professor of chemistry, Lehigh University, 1976-present; professor of nuclear medicine, Hahnemann University, 1971-present; director, Center for Health Sciences, Lehigh University, 1980-87. Honors: Robinson Award (1969), Brody Award (1978), H. S. Bunn Distinguished Chair in Chemistry (1985-Present), Who's Who in America (1886-present), Brady Cancer Achievement Award (1989), Henry Hill Award in Medicinal Chemistry (1997), Mosher Award for Contributions to Chemistry (1996), Ben Franklin Partnership Award for Corporate Consulting (2002).

Abstract

As America's population ages, one of the fastest growing causes of death is Alzheimer's dementia. Among several physical and chemical events occurring in the central nervous systems of disease sufferers is the depletion of stored and available acetylcholine, a critical neurotransmitter. Therapeutic interventions that have sought to increase acetylcholine's biosynthesis have been unsuccessful, while several candidate drugs that retard its metabolism do seem to offer modest clinical improvement. Both reversible and irreversible inhibitors of acetylcholinesterase, with unsymmetrical choline carbonates as the basic framework, have been designed, synthesized, and tested. New synthetic approaches have been developed to such inhibitors, which release chemotoxic agents like quinone methide and haloketones at the enzyme's active site. Promising inhibitors with IC₅₀ values in the micromolar range are in hand.

Local Section News

Looking Ahead: Student Recognition at the Annual Awards Banquet

ATTENTION FACULTY MEMBERS! The Central Arkansas Local Section Annual Awards Banquet will be held in Rooms A & B of the Donaghey Student Center, UALR, on Tuesday, April 25, 2006,

at 6:30 p.m. As is our tradition, we will present certificates of recognition to outstanding chemistry students from each of the colleges and universities within the Central Arkansas local section. The dinner will cost approximately \$12 per person, and we are asking the college/university chemistry departments to cover the cost for the students they wish to honor. Faculty members should submit the names of students for recognition to Cheryl Lichti (lichticheryl@uams.edu) by Tuesday, April 18, so that certificates and programs can be printed in a timely fashion. In addition, Marian Douglas (msdouglas@ualr.edu) needs an accurate count of the number of people planning to attend the banquet before Tuesday, April 18 so that the caterers will know how much food to prepare (last year we ended up paying for food that was not eaten because we did not have an accurate head count).

Nominations Requested for Central AR Section Professor of the Year

The Central Arkansas Section of the American Chemical Society is hosting its annual Awards Banquet at the University of Arkansas at Little Rock on Tuesday, April 25, 2006. At this event, we typically present an award to an outstanding high school chemistry teacher. For the fourth consecutive year, we will also honor a college chemistry professor. Past recipients of this award have included Dr. Don England (Harding University), Dr. Joe Jeffers (Ouachita Baptist University), and Dr. Dennis Matlock (Harding University.)

We are inviting each Student Affiliate chapter or chemistry club to nominate a faculty member from their college or university for this award. As a chapter, you can decide whom to nominate and assemble supporting material for your nomination. The supporting material should include a cover letter explaining why you are nominating your chosen faculty member and supporting letters of recommendation (three to five) from current and former students. In addition, you can include one or more letters of support from other faculty members. The cover letter should highlight the faculty member's accomplishments at your academic institution – for example, you can discuss items such as teaching awards, participation in research with undergraduates, and involvement with your ACS Student Affiliates chapter.

Please submit three copies of your completed nomination to Dr. Cheryl Lichti, Department of Biochemistry and Molecular Biology, University of Arkansas for Medical Sciences, 4301 W. Markham Street # 516, Little Rock, AR 72205 by Friday, April 7, 2006. The local section officers will judge the nominations (unless there is a conflict of interest), and the winner of the award will be announced at the Awards Banquet.

Regional Meeting: Don't forget the SWRM meeting will be hosted by the Central Arkansas ACS in October, 2008. We're looking for members to volunteer for all aspects of organizing the regional meeting. The organizing committee will be meeting in April to continue planning. To volunteer, contact Marty Perry, perrym@obu.edu or 870-245-5217.

Don't forget to register early for the National ACS Meeting in Atlanta (March 26-30, 2006). Early registration before March 8th is required for the discount and to have the registration materials delivered to you before leaving for the meeting. Those who register later will have to stand in line at the meeting to obtain their registration materials.

If you have an article or job posting that you would like to have considered for publication in our newsletter, send it to odonnej@hsu.edu for review.

Ever at a loss as to what's going on in the section?
Simply visit the section's website:

<http://membership.acs.org/c/centralarkansas>

You'll find the section's meeting schedule, announcements, and information about services provided by the section, along with other useful links.

Directions: For March 6, Monday, We have reserved Pryor-England Science and Engineering Center Room 113 for 6:30 to 9:00 p.m. The parking lot to use is on East Market Street between Lott Tucker Drive and Blakeney Streets.

From Highway 67/167, take Searcy Exit 46. After exiting onto the ramp to the right, turn right (West) at the traffic light at the end of the ramp (WalMart on right side) proceed West on Race Street for about a mile. Turn left at Dandy Don's Grocery/Gas Station onto Lott Tucker Drive. Proceed south one block and turn into parking lot of science center. Enter door at extreme west end of building (other end from Greenhouse) turn left at first hall and classroom is first classroom on left, Room 113.

Dixie Cafe: If you are coming from South, you will see Dixie Cafe on right between Exit 45 and 46. It is on access road. Take Exit 46 turn left at traffic light on ramp and right at next traffic light and it is 0.25 mile on right past shopping center and Chinese restaurant.

The *Central Arkansas Chemist* is published as needed by the Central Arkansas Local Section of the American Chemical Society. Section Chair, Marty Perry, Ouachita Baptist University, Arkadelphia, AR 71998, 870-245-5217 Address all correspondence to the Section Secretary, Janice O'Donnell, Henderson State University, 870-230-5118, odonnej@hsu.edu. Newsletter contributions should be sent directly to the Section Secretary in electronic form. The Central Arkansas Local Section Web site is <http://membership.acs.org/c/centralarkansas>
