TarHelium

NORTH CAROLINA SECTION
AMERICAN CHEMICAL SOCIETY

Vol. 10, No. 7 Raleigh, N.C. March, 1980

"SURFACE SYNTHESIS, ANALYSIS, AND ELECTROCHEMICAL PROPERTIES OF MOLECULES ATTACHED TO ELECTRODES SURFACES"

Speaker: Dr. Royce W. Murray
University of North Carolina
Chapel Hill

Date: Tuesday, March 11, 1980

Place: North Carolina State University
Raleigh, North Carolina

Time: 5:30 Happy Hour
North Lounge, Second Floor
NCSU Student Union
(Directions enclosed)

6:30 *Dinner
South Lounge, Second Floor
NCSU Student Union
(Order from the cafeteria; students-half price)

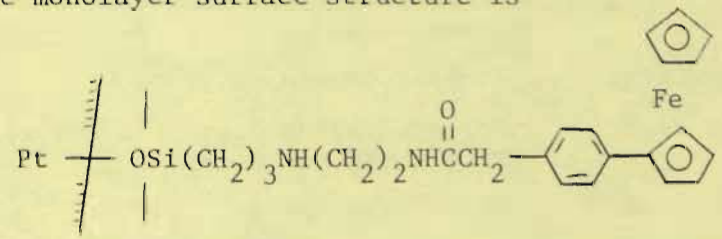
8:00 Lecture
South Lounge, Second Floor
NCSU Student Union

* Please make reservations by Friday, March 7, 1980. Call Sherry Handfinger at 966-2296 in Chapel Hill, Terry Laing at 684-2414 in Durham, or Linda Archer at 737-2548 in Raleigh.

Educated at Birmingham Southern College and Northwestern University, ROYCE W. MURRAY has been since 1960 a member of the faculty of the University of North Carolina at Chapel Hill, where he is Professor and Director of Undergraduate Studies in the Department of Chemistry. His educational specialty is fundamental analytical chemistry, and his research is conducted in electrochemistry and surface chemistry, where he has published about 70 research papers.

* * *

The ways in which monolayers and multilayers of molecules can be synthetically attached to surfaces of electronic conductors will be described. An example monolayer surface structure is



This and related surface molecules are analytically characterized both spectroscopically with X-ray photoelectron spectroscopy and fluorescence and electrochemically by studying transfer reactions with the metal. The electrochemical properties and their applications in electrocatalysis will be discussed.

SURVEY FROM SECTION COUNCILORS

At the ACS National Meeting in Houston in March, the Society's Council will be considering several petitions to amend the Society's Constitution and Bylaws. As representatives from your section on the Council, we would like to know your views on these issues, and in voting on these petitions, try to reflect the feelings of the section. We therefore seek your guidance.

Attached is a tabulation of the petitions up for action and a brief description of what each petition would achieve. After reviewing the information provided, we would appreciate it if you would complete the survey form and return it to one of us at your earliest convenience. The meeting in Houston will begin on March 23, so we would be grateful for a reply well in advance of that date. Please feel free to add comments on a separate sheet. If you would like to know more about any of the petitions, please give a call to one of us.

Thank you for your help and cooperation.

Maurice M. Bursey	Ernest L. Eliel	Marcus E. Hobbs
Dept of Chemistry	Dept of Chem.	Dept of Chem
Univ. of NC-CH	Univ. of NC-CH	Duke Univ
Chapel Hill 27514	Chapel Hill 27514	Durham 27706
966-5229	933-6197	684-2874

MEETING-IN-MINIATURE - SECOND CALL FOR PAPERS

On the afternoon of Tuesday, April 22, 1980, the Meeting-in-Miniature will be held on the campus of the University of North Carolina-Chapel Hill. An application form is enclosed and the deadline for receiving titles is Friday, March 14, 1980. Please respond early to facilitate preparing the complete program for the April TarHelium.

Contributions are encouraged from both academic and nonacademic laboratories. Participation by industrial and government laboratories has been minimal; however, the Editor hopes that scientists from these laboratories will participate this year. The meeting is an excellent opportunity for the academic and nonacademic scientific communities to interact and to share ideas that might prove mutually interesting.

1. Balancing Geographic Regions.
[Bylaw V, Sec. 3(a)]

This proposed bylaw amendment would raise the allowable population differential among the six electoral regions of the ACS from 5% to 10%. The increasing southward and westward mobility of members in recent years has resulted in frequent redistricting. By providing for a 10% allowable deviation, frequent redistricting, which is costly and inconvenient, may be avoided.

IN FAVOR _____ OPPOSED _____ NO OPINION _____

2. Waiver of Initial Membership Dues for Student Affiliates.
[Bylaw I, Sec. 4]

This bylaw amendment would allow Student Affiliates to apply for Society membership for the period from July 1 (following graduation) through the year's end at no cost to the student. An experimental program conducted in recent years has shown that the free half-year membership is a viable membership promotion tool.

IN FAVOR _____ OPPOSED _____ NO OPINION _____

3. Allotment of Funds to Divisions.
[Constitution Article XIV, Sec. 3, New Bylaw VIII, Sec. 6]

The petition would provide for a yearly allotment of funds to divisions, similar to the present provision for allotment of funds to local sections. Divisions would receive a base and a per member allotment, both of which would be tied to the same cost of living indicator as ACS national dues. Further, divisions would receive additional funds for participating in and attracting registrants to national meetings.

IN FAVOR _____ OPPOSED _____ NO OPINION _____

4. Funds Apportionment to Local Sections.
[Bylaw VII, Sec. 8]

This petition would serve to have the base allotment to local sections tied to the same escalator as that used for national dues.

IN FAVOR _____ OPPOSED _____ NO OPINION _____

5. Yearly Allotments to Local Sections.
[Bylaw VII, Sec. 8(b)]

This petition would tie the per member allotment for local sections to the same escalator as national dues. At present no escalator (such as the one proposed for divisions) applies to the per member allotment for local sections. Urgent action on this issue has been requested so that sections can accurately forecast 1981 income, and so that similar provisions for local sections and divisions may be considered at the same meeting.

URGENT ACTION YES ____ NO _____

IN FAVOR _____ OPPOSED _____ NO OPINION _____

6. Designation of Immediate Past President as an Officer of the Society.
[Constitution Article VI, Sec. 1, 2(a), and 3(a)]

The Society President is elected for a three year term as President-elect, President, and as Past President. However, only the President-Elect and President are designated as National Officers of the Society. Petitioners believe it would enhance the prestige of the office of President to have this elected official designated as a Society officer for each of the three years he serves in the Presidential succession.

IN FAVOR _____ OPPOSED _____ NO OPINION _____

7. Change in Method for Calculating the Dues.
[Bylaw X, Sec. 3(a)]

The dues escalator was established to maintain dues-supported programs in the face of inflation. However, action by Council may cause no escalation or only partial escalation in a given year. Reduction of the escalator for any given year could result in a substantial increase the next year under the present system. By changing the method of calculation so that the escalator formula applies directly to dues for the previous year, such a compounded increase could be avoided.

IN FAVOR _____ OPPOSED _____ NO OPINION _____

8. Privileges of Affiliates.
[Bylaw II, Sec. 2, 4, and 5]

This bylaw amendment would allow affiliates (not ACS members) of local sections and divisions and National Affiliates (not ACS members) to vote for Division and Local Section officers and on certain other Division and Local Section matters.

IN FAVOR _____ OPPOSED _____ NO OPINION _____

9. Membership Application Procedures.
[Bylaw I, Sec. 3(d)]

This petition would eliminate the requirement that an applicant for ACS membership be nominated by two members of the Society. The petitioners note that it is impractical to check on or obtain any benefit from the nominators and the provision also hinders unnecessarily membership from some prospective applicants.

IN FAVOR _____ OPPOSED _____ NO OPINION _____

APPLICATION
Meeting-in-Miniature
Tuesday, April 22, 1980
Venable Hall
University of North Carolina-Chapel Hill

Author(s): _____

_____

Position(s): _____

_____

Presented by: _____

Institution: _____

Title of Paper: _____

_____

_____

Section: ___ Analytical ___ Inorganic
___ Biochemical ___ Organic
___ Chemical Education ___ Physical
___ Polymer

Type: Regular Session Only: ___
*Either Regular or Poster Session: ___
*Poster Session Only: ___

Type of Projector (if any): _____

*If sufficient interest is shown, a poster session will be added to this year's program.

Application Deadline: Friday, March 14, 1980
Mail to: Dr. William F. Gutknecht
Research Triangle Institute
P. O. Box 12194
Research Triangle Park, N. C. 27709

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1-800-241-5450

TWO SECTION MEMBERS NAMED TO KENAN PROFESSORSHIPS

Dr. MARY ELLEN JONES, Department of Biochemistry, and Dr. ROYCE W. MURRAY, Department of Chemistry, were recently named to Kenan Professorships at the University of North Carolina-Chapel Hill. Congratulations from the section to these honored members.

DIRECTION TO MEETING AT NCSU

The NCSU Student Union is located at the intersection of Cates Dr. and Morrill Dr. next to Reynolds Coliseum and across the street from Carmichael Gymnasium. When approaching campus from the Beltline on Western Blvd., turn left onto Morrill Dr. at the Mission Valley Shopping Center. When approaching campus from the Beltline on Hillsborough St., turn right onto Dan Allen and left onto Cates, which is the second possible left turn after crossing under the railroad tracks. Park either in the gym or the coliseum parking lots. Avoid labeled residence parking and 24 hour reserved parking.

AREA SEMINARS

Mar. 13 Dr. ROBERT A. STEVENS, University of California, Los Angeles, "Recent Studies on the Total Synthesis of Natural Products," 11:00 am, Room 308 Venable Hall, UNC-CH.

17 Dr. C. JUDSON KING, University of California, "Solvent Extraction for Removal of Organics from Water," 4:00 pm, 11 Riddick Engineering Lab, NCSU.

21 Dr. W. ROUSH, Massachusetts Institute of Technology, "Some Stereochemical Aspects of the Intramolecular Diels-Alder Reaction," 3:30 pm, Room 130 Gross Chemical Lab, Duke.

28 Dr. R. S. DRAGO, University of Illinois, Title to be announced, D. G. Hill Memorial Lecture, 3:30 pm, Room 130 Gross Chemical Lab, Duke.

31 Dr. R. BYRON BIRD, University of Wisconsin, "Molecular Explanations of the Flow Phenomena of Polymeric Liquids," 4:00 pm, 11 Riddick Engineering Lab, NCSU.

Apr. 4 Dr. F. BIRKELHAUPT, Vrije University, Amsterdam, "p-s Hydridization with Phosphorous and Arsenic," 3:30 pm, Room 130 Gross Chemical Lab, Duke.

10 Dr. NORMAN SUTIN, Brookhaven National Laboratory, "Photo-Induced Electron Transfer Reactions," 11:00 am, Room 308 Venable Hall, UNC-CH.

TARHELIUM IS PUBLISHED BY THE NORTH CAROLINA SECTION OF THE AMERICAN CHEMICAL SOCIETY. THE VIEWS EXPRESSED HEREIN ARE NOT NECESSARILY THOSE OF THE SECTION. DIRECT ALL CORRESPONDENCE TO DR. WILLIAM L. SWITZER, EDITOR, C/O CHEMISTRY DEPARTMENT, NORTH CAROLINA STATE UNIVERSITY, RALEIGH, N. C. 27650.

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