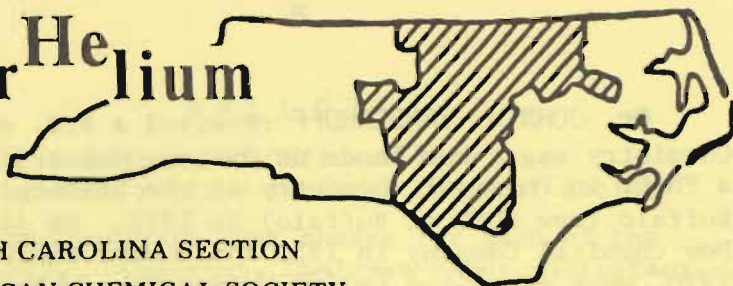


Tar Helium



NORTH CAROLINA SECTION
AMERICAN CHEMICAL SOCIETY

Vol. 10, No. 4

Raleigh, N.C.

December, 1979

"CHARACTERIZATION OF LATEXES"

- Speaker: Dr. John W. Vanderhoff
Lehigh University
Bethlehem, Pennsylvania
- Date: Tuesday, December 11, 1979
- Place: Meredith College
Raleigh, North Carolina
- Time: 5:30 Happy Hour
Wine and cheese at the Packhouse
in the Student Union at N. C.
State University (Directions inside)
- 6:30 Dinner*
President's Dining Room
Meredith College (\$6.25 - full
members; student members - half
price)
- 8:00 Lecture
107 Hunter Hall
Meredith College

* Please make reservations by Thursday, December 6th, 1979. Call Sherry Handfinger at 966-2296 in Chapel Hill, Terry Laing at 684-2414 in Durham or Linda Archer at 737-2548 in Raleigh.

Dr. JOHN W. VANDERHOFF received a B.S. degree in Chemistry magna cum laude at Niagara University and a Ph.D. in Physical Chemistry at the University of Buffalo (now SUNY at Buffalo) in 1951. He joined the Dow Chemical Company in 1950 and worked there until 1970, when he joined Lehigh University, where he is Professor of Chemistry, Associate Director-Coatings of the Center for Surface and Coatings Research, Director of the National Printing Ink Research Institute, and Co-Director of the Emulsion Polymers Institute. He spent the year 1965-66 with Professor J. Th. G. Overbeek at the van't Hoff Laboratory of the University of Utrecht as part of Dow's Career Scientist Assignment Program. He shared with E. B. Bradford the Union Carbide Chemicals Award of the American Chemical Society for 1964-65 and will receive the Borden Award for Plastics and Chemistry at the Houston meeting in 1980.

* * *

Polymer latexes (colloidal dispersions of sub-microscopic polymer particles) dry to form continuous films in which the particles have lost their identity. This film formation process is the basis for many practical applications. The latexes used for these applications are often prepared using a combination of relatively hydrophobic monomers with small concentrations of monomers containing functional groups. These latexes can be characterized as to the locus and type of functional groups by cleaning the latex by ion exchange or serum replacement and determining the number and acid (base) strength of the functional groups by conductometric or potentiometric titration. These characterization methods are described, and results are presented, not only for several practical systems, but also for the preparation of model colloids using well-characterized monodisperse latexes.

B A L L O T

Election of Officers-1980
 North Carolina Section-American Chemical Society

Please indicate your choice for each of the offices below: Chairman, Chairman-elect, Secretary, Treasurer, Councilor, and Alternate Councilor. Please mail to: Dr. Suzanne Purrington

Department of Chemistry
 North Carolina State University
 Raleigh, North Carolina 27650

Please sign the outside envelope legibly to validate your ballot. All ballots must be received no later than 12:00 noon, Friday, December 7, 1979.

CHAIRMAN:

_____ Forrest W. Getzen (NCSU)

CHAIRMAN-ELECT:

_____ William Gutknecht (RTI)

_____ Kathryn MacLeod (EPA)

SECRETARY:

_____ Slayton Evans (UNC)

_____ Richard Neeley (Meredith)

TREASURER:

_____ Robert Izydore (NCCU)

ALTERNATE COUNCILOR:

_____ Robert Ghirardelli (ARO)

_____ Monica Nees (NC/STRC)

COUNCILOR:

_____ Marcus Hobbs (Duke)

_____ Charles Moreland (NCSU)

ABOUT THE CANDIDATES

Dr. FORREST W. GETZEN is Professor of Chemistry at North Carolina State University where he has served on the faculty since 1961. He received his BS degree in Chemistry from VMI and his PhD from MIT. Dr. Getzen, who is recipient of the Scroll of Honor from the North Carolina Institute of Chemists, served as the first president of that organization. He has been active in the American Chemical Society serving as Treasurer and as Congressional Science Councilor for the North Carolina Section. He is presently completing the unexpired term of Chairman-elect for Sally M. Horner. He has also been active in the American Institute for Chemists serving as Chairman of the Student Awards Committee, Chairman of the Professional Education and Training Committee, Fellow and Director-at-Large. Dr. Getzen is also a member of the NC Academy of Science, the NY Academy of Science, the AAAS, the AIME, and Sigma Xi.

A native of Milwaukee, Wisconsin Dr. WILLIAM GUTKNECHT attended the University of Wisconsin-Milwaukee, receiving a BS degree in chemistry. He did graduate work at Purdue University where he received a PhD in analytical chemistry. Following postdoctoral work at the University of New Orleans, he served as assistant professor of chemistry at Duke University. Dr. Gutknecht now works at RTI as an Environmental Chemist. He has served as chairman of the section's Hospitality Committee for three years and has served on the Nominating Committee.

KATHRYN MacLEOD received both her BSCh and MS degrees from the University of South Carolina. She has been employed by the U. S. Environmental Protection Agency since 1971. Prior to that, she worked for the South Carolina Pollution Control Authority. She has been an active member of the North Carolina Section ACS since 1971 and has served on the PEP and Nominating Committees as well as being Section Secretary since 1977.

Dr. SLAYTON A EVANS, Jr. received his BS degree in Chemistry from Tougaloo College (Tougaloo, Miss) and his MS and PhD from Case Western Reserve University. He had postdoctoral appointments at the University of Texas at Arlington and the University of Notre Dame before joining the faculty at Dartmouth College. He joined the faculty at the University of North Carolina at Chapel Hill in 1974 and is currently Associate Professor of Organic Chemistry. His research interests are stereochemistry and development of synthetic methodology with organosulfur and organophosphorus reagents. He is a member of the membership committee of the North Carolina Section and during his tenure on that committee the local section was honored by the National ACS for its recruiting efforts.

Dr. RICHARD NEELEY is currently Assistant Professor of Chemistry at Meredith College in Raleigh. He is a native North Carolinian who received his BS degree in chemistry in 1970 from Davidson College. After two intervening years of military service at Walter Reed Army Medical Center, he received his PhD in 1977 from the University of Illinois and began teaching at Meredith College where he remains today. He is active in the local North Carolina Section of ACS, serving for the past two years on the membership committee and the program committee.

Dr. ROBERT A. IZYDORÉ received his BS degree from Pennsylvania State University and his PhD degree in Organic Chemistry from Duquesne University. Following a Postdoctoral appointment at Duke, he served as instructor at the McKeesport Campus of Pennsylvania State University. Dr. Izydore then joined the faculty at North Carolina Central University where he now holds the rank of professor. He has served on the Membership Committee for the North Carolina Section of the ACS and is presently completing an unexpired term as Treasurer for Art Diesing.

Dr. ROBERT G. GHIRARDELLI received his BS degree from the University of San Francisco and his PhD degree from the California Institute of Technology. Dr. Ghirardelli is presently employed by the Army Research Office where he is Director of the Chemical and Biological Sciences Division. He is also an Adjunct Associate Professor at Duke University. Dr. Ghirardelli was Section Chairman in 1970; he was instrumental in starting the local Section Newsletter. He has been Alternate Councilor since 1976.

Dr. MONICA NEES, Manager of Technical Operations of the North Carolina Science and Technology Research Center, works in computerized information retrieval in chemistry, biology and medicine. She received her BS and MS from Roosevelt University in Chicago, PhD in organic chemistry from the University of Maryland, College Park, and taught at Southern Colorado State College and the University of Maryland, Baltimore County campus. Dr. Nees has served the North Carolina Section as editor (and namer!) of TarHelium, Chair-elect, Chair in 1976, and instituted the Section's highly successful Short Course program and summer fellowships for graduate students. Presently a member of the Executive Committee and the steering committee to bring the 1984 Southeastern Regional ACS meeting to the Triangle, she would welcome the opportunity to serve the Section as Alternate Councilor.

Dr. MARCUS E. HOBBS is University Distinguished Service Professor Emeritus of Chemistry at Duke University. He is a graduate of Duke where he also received the AM and PhD degrees, and has been a member of the Duke faculty since 1935. Beginning his administrative career as a chairman of the Chemistry Department, he has served Duke as dean of the graduate school, dean of the University, Vice-provost and Provost. In addition to some other recognitions, in 1959 the Department of Army awarded Dr. Hobbs "The Outstanding Civilian Service Medal" for his contribution to the establishment of the Army Research

DIRECTION TO PACKHOUSE

The Packhouse is located in the basement on the courtyard side of the NCSU Student Union. The Student Union faces Cates Avenue across the street from Carmichael Gymnasium and next to Reynolds Coliseum. From the Beltline, exit on either Hillsborough St. or Western Blvd. From Hillsborough turn right onto Dan Allen Dr. then left onto Cates which is the first street after the stop sign. From Western, turn left onto Morrill Dr. at the Mission Valley Shopping Center. Park in any "S" or "C" area which is not reserved. Both the gymnasium and coliseum parking lots are convenient to the Union. Directions to Meredith will be given at the happy hour.

MEMBERSHIP MILESTONE

In November, the Section membership exceeded 1100 for the first time. To increase our membership further, the Membership Committee asks your help. If you know of colleagues who may be interested in joining the ACS, please give their names and address to one of the committee members so that they may be contacted with further information and/or application forms.

Larry Bowen, Chairman (NCSU)	737-2995
Slayton Evans (UNC)	933-6319
Thomas Henderson (Burr.-Well)	549-8371 Ext 209
Robert Izydore (NCCU)	683-6351
Charles Lochmuller (Duke)	684-2414
Richard Neeley (Meredith)	833-6461
Van Wheeler (EPA)	541-2442

AREA SEMINAR

Dec. 5 Dr. WILLIAM A. BURTON, "Energy with Emphasis on Solar Energy," 4:00 p.m., Room 105, Science Annex, Fayetteville State University.

Office (formerly ARO-D). He was involved in the establishment of the Research Triangle Institute and now serves as Chairman of its Executive Committee. He is a member of the American Chemical Society, The Chemical Society (London), The American Institute of Chemists and the American Association for the Advancement of Science. At present he serves as one of N. C. Section Councilors and in the past has served as Secretary-Treasurer, Program Chairman, Councilor, and Chairman of the Section.

Dr. CHARLES MORELAND is Professor of Chemistry at North Carolina State University. He received his BS degree in 1960 and his PhD in 1964 from the University of Florida. Dr. Moreland has been active in the Section where he has chaired and/or served on the Hospitality and Nominating Committees. He was also an instructor along with Professor L. D. Quin of Duke in the Section's Short Course on ^{13}C NMR. He has been active in the area of NMR research for the past fifteen years and has collaborated in his work with scientists at UNC-CH, Duke, and the Research Triangle Institute.

1984 IS HERE

The North Carolina Section will host the 36th annual Southeastern Regional Meeting of the ACS in 1984. The proposed meeting site is Raleigh. The Planning Committee has worked hard to secure this meeting, but the work is just beginning. The success of this meeting will require considerable work from many people. Your response to future calls for help will be greatly appreciated.

SEMINAR CANCELLED

The seminar by Dr. Henry Blount scheduled for December 3, 1979 at NCSU has been cancelled.

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