



Astrochemistry: What's New in the Field of Astrochemistry?

NORTH CAROLINA SECTION, AMERICAN CHEMICAL SOCIETY
SOCIAL • DINNER • ACS TOUR SPEAKER

Wednesday, January 21, 2009

RADISSON GOVERNORS INN

150 Park Drive, Research Triangle Park NC 27709-2168, USA.

Telephone: (919) 549-8631

<http://www.radisson.com/researchtrianglenc>

5:30 pm – Cocktails

Cash Bar (Wine/Beer), Soft Drinks hosted; Social/Networking

6:30 pm – Fixed-Menu Dinner*

Tossed salad • Beef/potato or Chicken/rice, Mixed vegetable medley • Chocolate cake

7:30 pm – Speaker, Dr. Yorke E. Rhodes

**You do NOT have to be an ACS member to attend!
You may attend the presentation ONLY at no cost (7:30pm)!**

Fixed-Menu Dinner - Subsidized Advance Registration:* \$20 per person; \$10 per student; limited to the first 40 persons and Advanced Registration payment must be received by Friday, January 17 (to meet the Radisson headcount deadline). **See the Registration Page for dinner choices and advance registration instructions. Call (below) if you have registration questions.

Directions: From I-40 [Dan K Moore Freeway], exit at Davis Drive.

- Coming from the east (Raleigh), bear RIGHT onto Davis Dr. Ramp turning LEFT (south) across I-40 turning RIGHT into the Service Park bearing RIGHT at the 4-way STOP to the Radisson.
- Coming from the west, bear RIGHT onto the Davis Dr. Ramp continuing straight across Davis Drive (light) into the Service Park bearing RIGHT at the 4-way STOP to the Radisson.
- Enter the Radisson through the main lobby. Dinner/presentation in the **2nd Floor Ballroom A** (see also the Radisson web site above for a map)

For questions, please contact either of the following:

John Hines (919) 541-6647; hines@rti.org

Melissa Pasquinelli (919) 515-9426; Melissa_Pasquinelli@ncsu.edu

Or the NC ACS Web Site at <http://membership.acs.org/N/NCarolina>

Abstract “Astrochemistry: What’s New....”

At the dawn of the space age in the 1960s, a handful of molecules were known to exist off Earth. Since those days of early robotic exploration of the Moon and Mars, fly-bys with spectroscopy of the outer planets, and radio astronomy of distant areas of our own galaxy and parts of the universe have brought forth a burst of molecular information. About 120 molecules, some new and some known, have been identified to date. What types and kinds of molecules exist? What varieties of molecular species have been found? How did they form, where do they occur, and what mechanisms exist for molecular formation? Can we model and predict what other molecules may occur? How has interstellar organic chemistry evolved? The content of the talk varies and the level of the talk is adaptable to the audience present.

Biography

Yorke Rhodes received a B. S. in soil chemistry from the University of Delaware in 1957, as Senior of the Year in the College, and then earned an M.S. in organic chemistry in 1959 with William A. Mosher and Darrel Lynch. After completing his Ph.D. at the University of Illinois in 1964 with Prof. James C. Martin, he was a National Institutes of Health Postdoctoral Fellow with Kenneth B. Wiberg at Yale University. He joined the faculty of New York University at the University Heights campus in 1965 and developed research areas in SO₂ solvent chemistry, electrocyclic reactions, small ring chemistry, and carbocations, especially neighboring group cyclopropane-assisted cation rearrangements. He moved to the Washington Square campus in 1973 after a sabbatical leave with Horst Prinzbach at the Universitat Freiburg in West Germany. Work at the Square continued in carbocations, led to alkyl group migratory aptitude studies and to synthetic studies in silyl ketene acetal chemistry for synthesis of quaternary neopentyls. He was a State Department exchange visitor to Prague, Czechoslovakia, and Zagreb, Yugoslavia, in 1977 and was also Gastprofessor with Ivar Ugi at the Technische Universitat Munchen (TUM) in 1977, followed by a stay in 1978 as Alexander von Humboldt U.S. Senior Scientist Awardee at the TUM with Ugi. NASA/IEEE Summer Fellowships were held at the Jet Propulsion Laboratories at Cal Tech in Pasadena with Wes Huntress in 1980 and 1981 (astrochemistry). In 1987, he was professor associate at the Centre d'Astrophysique, Universite de Grenoble, France, with Alain Omont (astro-polycyclic aromatic hydrocarbon chemistry). Rhodes was awarded the Golden Dozen Award for Teaching Excellence in the College of Arts and Science in 1991, and again in 1996. Professor Rhodes has been director of the Dual Degree Program in Science and Engineering at New York University and Stevens Institute of Technology, Professor in a Residence in a University residence hall, and is very active in the New York Academy of Sciences and American Chemical Society local section activities, sponsoring a variety of symposia, poster sessions and other activities for students. He was chair of the ACS New York Section in 1998 and as an ACS Councilor was also a member of the “Local Section Activities Committee” and welcomes discussions about local sections. He has served on Department of Education review panels and is an educational consultant/evaluator for several undergraduate and high school research mentoring programs.

ADVANCE REGISTRATION INSTRUCTIONS

ACS Tour Speaker, January 21, 2009 at the Radisson Governors Inn, RTP sponsored by the NC ACS. Social (5:30pm), dinner (6:30pm), and presentation (7:30pm).

Advance registration payment must be received by NC-ACS by Friday January 17th (final head count required by Radisson). Mail check together with the Advance Registration form (below) to:

John Hines
P.O. Box 12194
RTI International
Research Triangle Park, NC 27709

All advance registrations will be confirmed by email on or before Monday, January 20th. Cancellations are subject to discretion of NC-ACS. Guests may also be able to attend without Advance Registration by making payment directly to the Radisson at the event for their own fixed-menu dinner costs (~\$31-33 with tax and gratuity). Call John Hines (919-541-6647 work) to determine whether this is possible.

You do NOT have to advance register UNLESS you wish to participate in dinner!
(dinner will be held in the same room as the Social and Presentation)

ADVANCE REGISTRATION FORM

Name(s): _____
(printed)

Email (for confirmation): _____

Please make check payable to: **NC Section of the ACS** or **NC ACS**

\$20 per Non-student **\$10 per Student**

Advance Registration Dinner **selection:**

- Roast Prime Rib of Beef *au jus*, Twice Baked Potato, Fresh Vegetable Medley
- Traditional Chicken Piccata, Saffron Basmati Rice with wheat berries, Fresh Vegetable Medley

**Vegetarian entrée available upon request

All dinners **include** Garden Fresh Tossed Salad, Croissants and rolls with Butter, dessert (Chocolate Cake), freshly ground/brewed Coffee and Tea.