



597th NETS-ACS Meeting

What is a Polymer

Date: Thursday, February 10th, 2011

Location: Eastman Lodge

Agenda

6:15 PM Social gathering

6:30 PM Dinner

7:15 PM Dr Marc A. Strand

Menu

Catered by McAlister's

Assortment of McAlister's Club, Turkey club Croissant, Orange Cranberry Club and Club Wraps

Hot Potato Bar

Assorted Fresh-Baked Cookie

Tea and Lemonade

The cost for the meal is \$17/person. Make check to "NETSACS" Indicate number in your party. RSVP's are fine with the understanding that payment will be made at the meeting. No cost to attend the lecture only.

Please RSVP by noon on February 1st, 2011

Please reply to:

Mary K. Moore

mkmoore@eastman.com

423-229-1911

Next Meeting on March 3rd, 2011

Bill Tindall speaks out about
Batteries and how they work

Directions to the Eastman Lodge

Use I-26 – Take Exit 3 for Meadowview Parkway.

Turn west, going under I-26 on Meadowview Parkway \ Reservoir Road

The name of the road will become only Reservoir Road

Go 2.3 miles and turn right on Bays Mountain Park Road

You should see a sign for Bays Mountain Park

Take the right fork in the road in 0.2 miles to the Lodge

Dr. MARC STRAND

Eastman Chemical Company
Polymer Technology Division

What is a Polymer

Abstract: according to Wikipedia; A **polymer** is a large molecule composed of repeating structural units. These subunits are typically connected by covalent chemical bonds. Although the term *polymer* is sometimes taken to refer to plastics, it actually encompasses a large class of natural and synthetic materials with a wide variety of properties. These properties are a result of chemistry, physics, molecular architecture and processing history. We will explore a little bit of what is a polymer, how they work and why they behave as they do.



Bio

Dr. Marc Strand received a B.S. Degree in Chemistry from Missouri Western State College in 1981 and his Ph. D. in Polymer Chemistry from the University Of Tennessee in 1987 under the direction of Professor Spiro Alexandratos. His Ph.D. work was related to ion exchange resins and solid-supported liquid membranes. Upon Graduation, he worked for Becton Dickenson Polymer Research and later joined Eastman Chemical Company in 1988. He has spent most of his career with Eastman Chemical Company working on various aspects of polyester chemistry. This includes manufacturing process support for PET and copolyesters, development of new copolyesters for profile extrusion, extrusion blow molding, adhesion applications, and calendaring. For the past seven years he has led the research effort for *Cadence* Resins for Calendered Film. Dr. Strand currently holds about 20 patents. In addition to working full time for Eastman Chemical Company, he has taught high school chemistry (2003 to present), organic chemistry for Virginia Intermont College (2002-2003) and The Organic Chemistry of Polymers at the graduate level for the University of Tennessee (Spring 2002). He is currently team teaching a course for Eastman Chemical Company entitled “The Chemistry of Eastman” He is also part of the advisory board for the Chemistry Department at the University of Tennessee. His hobbies include music and woodworking.