



Chairman's Message

Greetings The CRG activity schedule is in high gear, with our April technical meeting just past and two of our major events coming up. We had a successful Spring meeting where the technical presentations generated more discussion than I've seen in a long time. Thanks to Chitta Lahiri, who put together the meeting and the technical program, and our speakers Ralph Annicelli, Irene Yurovska, and Orawan Taikum (of Crompton, Cabot, and Degussa, respectively).

Coming up on June 8-10 is our annual Mixing Symposium (details to be found elsewhere in this newsletter). The Symposium, as you probably know, funds our scholarship program, so we need it to be successful on a continuing basis. The attendance at the Symposium was a little light last year, so we hope to have more attendees this year to keep our scholarship fund healthy. If you know of anyone who might be interested in attending, please have them contact Mike DiGiovanni, Bob Ohm, or any of the Board for additional information and registration forms. If you've seen the mailings from other organizations that offer courses such as ours, you'll find that ours is about half the cost and (in our opinion) double the quality! Please support the Symposium by promoting attendance to your employees, suppliers and customers.

Also on June 17 is our annual Golf and Tennis outing. This event is always a lot of fun and a good way to meet those customers or coworkers on an informal basis. Take some time from your busy work schedule and commune with others in the rubber industry. You'll be glad you did!

Lastly, be sure to mark you calendars for our Fall meeting on November 18 when we'll have the Chair of the Rubber Division of the American Society, Paul Esposito, speaking to us after dinner. He'll fill us in on the state of the Rubber Division and on upcoming Rubber Division events. I hope to see you there.

Have a Great Summer,

Tom Jablonowski

2004 Connecticut Rubber Group Chair

Paid your dues yet?

If not, send your check along with the application form contained in the previous edition of this newsletter, as soon as possible. You need to be a paid member to continue to receive mailings (for the golf outing and technical meetings) and be eligible to sponsor scholarship applicants, and receive this Newsletter.

If you need a membership application, contact the newsletter editor, any board member or our web site.

Unsure if you have paid your 2004 dues? Contact your CRG Treasurer, Juan Cardona at:

203-426-4223 or

jjcardona@charter.net

Reserve these dates:

Mixing Course

June 8 - 10, 2004

2004 CRG Mixing and Continuous Extrusion Course will be held at:

**The Marriott Courtyard,
Waterbury, CT**

Golf Outing

Thursday June 17, 2004

**2004 CRG Golf Outing will be held at:
The Tradition, Wallingford, CT**

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Mark Your Calendars:

2004 Meetings	
ACS Rubber Division May 17 – 19 Spring Meeting Grand Rapids, MI October 5 – 8 Fall Meeting Columbus, OH	Connecticut Rubber Group June 8 – 10 Mixing, Extrusion and Continuous Vulcanization Symposium June 17 Golf & Tennis Outing/Annual Membership Meeting September 20-21 Design of Experiments Course, Norwich, CT November 18 Fall Technical Meeting, location TBA

ANNUAL MIXING COURSE

Our Annual Mixing Symposium is scheduled for June 8-10, 2004. This year we will retain the very successful addition of Extrusion and Continuous Vulcanization on the course agenda. Most of the original course subjects are maintained while adding this new and exciting portion to the course.

In addition to the material presented, this is an excellent opportunity to network with others in the industry who share the same daily challenges of the Rubber Industry. The course fee includes daily lunches, morning and afternoon coffee breaks as well as a Banquet Dinner Wednesday evening. We would like to see attendance levels of 70-90 people, this allows us to give the individual attention to our attendees while maximizing our income potential.

This function is our prime fundraiser and allows us to give multiple scholarships. We need everyone in the group to help promote the course. If anyone is interested in attending the course please contact anyone on the Symposium Committee and we can answer any questions. Come join in the fun and educational experience.

Mike DiGiovanni

CRG Chairman and
Mixing Symposium Committee Chairman



AREA DIRECTOR'S REPORT

Spring 2004

Next month, the Rubber Division Meeting will be held in Grand Rapids, Michigan from Monday, May 17th to Wednesday, May 19th in the Amway Grand Plaza hotel.

The following day, Thursday May 20th, the same hotel will host a conference on Rubber Modified Asphalt, which may be of interest to our members. This latter meeting is cosponsored by the Rubber Division, Rubber Manufacturers Association and the Rubber Pavements Association with the theme "Working together to Improve Roads".

A prestigious Rubber Division event is the Science and Technology Awards Banquet, which will be held immediately after the Suppliers Cooperative Reception on Monday evening. The following awards will be presented:

- ✦ Melvin Mooney Distinguished Technology Award:
Dr. Oon Hock Yeoh
- ✦ George Stafford Whitby Award:
Dr. Roderic P. Quirk
- ✦ Sparks-Thomas Award:
Dr. Andy H. Tsou

The 25-Year Club Reception and Luncheon will take place on Tuesday, May 18th starting at 11:30 am.

Golf enthusiasts should appreciate the Thornapple Point Golf Club on Wednesday, May 19th, with a shotgun start at approximately 1:30 pm.

Meetings for the next two years are:

- 2004: May 17-19, Grand Rapids, MI;
October 5-8, Columbus, OH
- 2005: May 16-18, San Antonio, TX;
November 1-4, Pittsburgh, PA

Please let me know if you have any concerns that should be forwarded to the Rubber Division and I'll make sure your voice is heard

Jeff Linn

Area Director, 2004



The Connecticut Rubber Group

Subdivision of the Rubber Division of the American Chemical Society

In Conjunction with the Farrel Corporation, Uniroyal Chemical and Davis-Standard (Crompton Businesses), Cober Electronics, and R. T. Vanderbilt Company sponsors a

SYMPOSIUM ON MIXING, EXTRUSION AND CONTINUOUS VULCANIZATION OF ELASTOMERIC COMPOUNDS

An intensive 3-day course to be held on June 8, 9 and 10, 2004 at The Courtyard by Marriott, Buckingham Square, Waterbury, Connecticut

Enrollment is limited to the first 90 persons remitting payment.

Symposium Topics Include:

- ◆ Mixing Machinery for Polymeric Compounds
- ◆ Comparing Tangential and Intermesh Mixers
- ◆ Principles of Extrusion
- ◆ Farrel Corporation Plant Tour
- ◆ Compounds for Continuous Vulcanization
- ◆ Analysis of Mixing Cycles and Procedures
- ◆ Preventing Polymer Degradation During Mixing
- ◆ Formulating and Mixing of EPDM Compounds for CV
- ◆ Mixing and Curing Silicone Compounds
- ◆ Operation/Maintenance of Mixing Equipment
- ◆ Tour of a Local, Operational CV Line
- ◆ Crosshead Extrusion of Rubber Rollers
- ◆ Processing Solid Urethane & EPDM/Silicone Elastomers
- ◆ Principles of Microwave Curing

Course Fee ***\$550.00 payable to The Connecticut Rubber Group (\$500.00, if paid by 5/14/2004). Fee includes a bound course curriculum, the latest edition of the R. T. Vanderbilt Handbook, one year free dues for first time members to the Rubber Division, A.C.S. (Normally \$44.00), three lunches and continental breakfasts, one group dinner, and morning and afternoon coffee breaks.***

Accommodations: ***Call Courtyard by Marriott, 63 Grand Street, Waterbury, CT 06702 Phone (203) 596-1000. Discount rate for attendees is \$79.00 per night plus tax, single or double. Mention that you are with CRG.***

(Accommodations are not included in the course fee.)

To Enroll: ***Mail check and completed form below as soon as possible to:***

***Mr. Ray Cash, R. T. Vanderbilt Company, Inc.
30 Winfield Street, Norwalk, CT 06855***

***Phone: (203) 853-1400
Fax: (203) 853-7726***

Name: Ms. Mrs. Mr.

Title: _____

First Name Middle Name Last Name

Company Name: _____

Business Address:

List the one issue that you would like to have this course address:

Daytime Phone: () E-mail _____

Full time student rates are available. Additional discount of \$25.00 per person available for 3 or more persons from the same company. No refunds after 5/15/04.

Please note that, if adequate reservations are not received, the CRG reserves the right to cancel the course and refund each applicant's fee.

Advertisement

A Special Offer for Connecticut Rubber Group Members: Introducing the **BLUE BOOK ONLINE!** *A special \$99.00 Offer for Connecticut Rubber Group Members!*

Rubber World Magazine is proud to introduce the Blue Book Online with a special offer for Connecticut Rubber Group members. The Blue Book Online, regularly priced at \$135.00 for a one-year subscription is now available to Connecticut Rubber Group members for only \$99.00! In addition to the special low price, a **\$10.00 donation will be made to the Connecticut Rubber Group's scholarship fund** for every Blue Book Online subscription purchased through this special offer.

The Blue Book of Materials, Compounding Ingredients and Machinery now online offers you several great improvements on delivering the information you have come to rely on:

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To see how convenient Blue Book Online is visit the Blue Book Online DEMO at www.rubberworld.com/bluebook. To take advantage of this special Blue Book Online offer you can either call 330-864-2122 or subscribe online at www.rubberworld.com/bluebook. When ordering, be sure to use **Promotion Code: CONNRG.**

From the Historian's Corner



There's an eight-story tire in Detroit Michigan that has been turning heads for more than 40 years as one of the nation's most recognizable roadside icons. The Uniroyal® Giant Tire was originally created as a Ferris wheel attraction at the 1964/1965 New York World's Fair. A 100-horsepower motor powered the wheel with 24 barrel-shaped gondolas – each carrying four people – that were rotated around the circumference of the tire. More than two million people rode the Giant Tire Ferris wheel during the fair, including Jacqueline Kennedy and her children, John Jr. and



Caroline.

After the 1965 World's Fair festivities ended, the Giant Tire was shipped by rail in 188 sections to the Uniroyal sales office in Allen Park, Michigan, and has towered alongside I-94 near the Metro Airport ever since. Over the decades it has become an important symbol of Uniroyal's 111-year heritage and a cultural icon for the city of Detroit known the world over.

In 1994, the Giant Tire received a facelift to give it a sleeker, more modern look. Neon lighting and a new hubcap were added. In August of 1998, the Giant Tire was modified again -- this time to resemble a NailGard® tire. A giant nail was placed in the tread to demonstrate the product's ability to seal 90% of tread punctures up to 3/16" in diameter.

In 2003, Uniroyal invested close to \$1 million to renovate the Giant Tire as its contribution to Detroit's I-94 corridor revitalization effort. The renovation, which included structural repairs and an update to the exterior, will ensure that the Giant Tire is enjoyed for many years to come. Americans have been driving on Uniroyal tires since 1892, although back then Uniroyal was known as the U.S. Rubber Company.

Ralph

Ralph Annicelli, Historian

The Spring 2004 Technical Meeting

was held April 6th at Rapps Paradise Inn

Dr. Irene Yurovska from Cabot Corporation presented *Carbon Black for Non-Tire Applications*. The automotive industry demands superior surface appearance of molded and extruded parts while requiring manufacturers to decrease costs. To respond to these contradicting needs Cabot offers new carbon blacks that allow higher processing productivity, higher filler loading, lower mold fouling, and lower surface defects. New carbon blacks IRX 1072, and Spheron 4000 grades were discussed for improved productivity in molded products. Cabot Elastomer Composites (CEC) was introduced as an innovated mixing process for natural rubber. CEC can reduce mixing steps and improve physical properties of natural rubber parts.

Dr. Orawan Taikum from Degussa Corporation presented *Silane-Sulfur Coupling in Sulfur, Peroxide and Metal Oxide Curing Systems*. This paper focused on reinforcement of the silica-silane filler systems in three different elastomer systems. In silica-filled NBR compounds with sulfur cure, the thiocyanate silane Si 264 showed the best balance between high reinforcement, hysteresis and processability. In silica-filled, peroxide-cured EPDM compounds, the vinylsilane VP Si 225 acts as a silica-rubber coupler and activator to increase crosslink density. This results in better reinforcing properties than an activator like TAC, which only increases crosslink density. In the case of silica filled chloroprene rubber with metal oxide cure, a silica-rubber coupling effect is achieved by the chlorosilane Si 230. The use of more active mercaptosilane like VP Si 263 results in higher reinforcement, but processing is more difficult

Ralph Annicelli presented a talk on *Improving the Heat Resistance of HNBR, ACM and EAM by the use of antioxidants*. Various antioxidants were tested in hydrogenated nitrile-butadiene (HNBR), polyacrylic (ACM) and ethylene-acrylic (EAM) polymers. In all 3 systems, it was found that antioxidant synergists age no better than a corresponding additional amount of the best primary antioxidant, Naugard[®] 445.

Visited your Website lately?

Your CRG website was completely revamped last year, is updated often and can be viewed at: www.ctrubbergroup.org.

Should you misplace this newsletter, you can now easily review its contents on your CRG web site. Be sure to add it to your "favorites" list to access the latest information about upcoming events.

Our site links up with the Rubber Division, ACS, Rubber & Plastic News, Rubber World and the Naugatuck Historical Society. Just click on to our "Links" section.

We encourage you to take a look at this new website and comment on what else can be added to make this more useful to our membership. All comments can be sent to Art Delgrosso at artdel@rtvanderbilt.com.

Connecticut Rubber Group Newsletter

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