

Chicago Society for Coatings Technology ^{NEWS}

Member of Federation of Societies for Coatings Technology

August 2006

www.chicagocoatings.org

Volume 10, Issue 2

Monday, August 28, 2006 • Doubletree, Alsip*

Air Products - *Coalescing Surfactants for Low VOC Waterborne Coatings*
Eastman Chemical - *Regulatory Update for the Coatings Industry*

*NOTE VENUE CHANGE!

5:00 registration and cocktail hour • 5:45 Speakers • 6:45 Dinner



Coalescing Surfactants for Low VOC Waterborne Coatings

Ernest C. Galgoci, Khalil Yacoub, Ingrid K. Meier, Nancy M. Martin, Tai-Jun Lim, Kenneth A. Yoxheimer, and Virendra V. Shah
Air Products and Chemicals, Inc. • Allentown, PA

As legislation has required coatings with increasingly lower VOCs and, consequently, lower co-solvent levels, the ability of Gemini-type surfactants to lower the minimum film formation temperature (MFFT) of emulsion polymers has garnered interest as a means to enable formulation of low VOC coatings. This paper describes the MFFT reduction imparted by these so-called “coalescing surfactants” (CS) for a variety of emulsion polymers. A simple model whereby the CS preferentially adsorbs onto the surface of the polymer particles is provided to explain their apparent MFFT-lowering efficiency. Atomic force microscopy (AFM) showed that polymer films prepared using a CS were generally smoother than films prepared with higher-VOC polymer formulations that did not contain the CS. By utilizing CS, low-VOC (less than 100 g/L) starting-point formulations based on solvent-free urethane-acrylic hybrid polymers have been developed. While enabling low-VOC formulating, the CS were found to have minimal effect on the overall performance. The latest generation of CS showed even higher MFFT-reduction efficiency in the hybrid polymer.

Regulatory Update for the Coatings Industry

The coatings industry has had to adapt to many changes in recent years. Mass based environmental regulations have continually forced paint formulators to deal with the issue of their paints maintaining performance while meeting the VOC targets for their respective markets such as Transportation, AIM, and General Industrial. The solution to meeting both of these obligations is seldom easy or cheap, and often paint manufacturers have struggled with minimizing loss of performance with their current systems or investing significant time and capital to convert to lower VOC alternative technologies.

This presentation will cover current changes in the coatings arena such as HAPS and VOC delistings and the time table for meeting VOC targets for the different markets. Other items to be discussed will be formulation techniques to meet regulatory requirements through solvent substitution and the push to move away from mass based regulations to reactivity based regulations, which would benefit both the environment and the paint industry.

Bio:

Jerry M. Mitchell- Technologist in the Coatings Specialties and Solvents Technical Service Department at Eastman Chemical Company. I have been with Eastman for fourteen years mainly working with Eastman’s coalescing aids that are used in architectural paints.

Monday, August 28, 2006
Eastman Chemical – *Regulatory Update*
Air Products – *Wetting Agents*
Doubletree, Alsip* (*NOTE: VENUE CHANGE!)

Monday, October 2, 2006
Luzenac – *Formulating with Talc*
Hexion – *Architectural Coatings*
Monty’s Banquets, Bensenville* (*NOTE: VENUE CHANGE!)

Upcoming Events



Monday, November 13, 2006
Ferro – *Solar Energy Reflective Pigments*
Doubletree, Alsip* (*NOTE: VENUE & DATE CHANGE!)

Wednesday–Friday, November 1–3, 2006
ICE 2006
Ernest N. Morial Convention Center
New Orleans, LA

Getting it Straight

Glf and Tennis Outing

Golf Outing 2006 a great success!

Thank you to our sponsors and participants - we look forward to seeing you at next year's outing, Monday, July 23, 2007

Society Notes & Changes**NOTE: DATE CHANGE**

11/6/06 meeting now 11/13/06

NOTE: VENUE CHANGES

8/28/06 & 11/13/06 meetings now at
DOUBLETREE in Alsip.

10/2/06 meeting now at
MONTY'S BANQUETS in
BENSENVILLE.

Get more information about CSCT
news and events including maps and
directions at

www.chicagocoatings.org

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Troy

Ultra Additives

Wacker Chemical

Proposed BYLAW Changes
7/06B

2. Educator ~~and Student~~ Membership:

Any college or high school educator ~~or any college student that is on~~ employed on a full time basis shall be eligible for “Educator” ~~or “Student”~~ Membership”. But, such membership shall terminate three months after the individual ceases to qualify as “Educator” ~~or “Student”~~ member, both the dues and the rights and privileges of Educator ~~and Student~~ Members shall be determined by the Executive Committee.

Student Membership:

Any individual who is a full time student, registered in any educational institution of recognized standing in a course of study in chemistry, engineering, physics or other physical sciences leading to a degree.

4. Retired Membership:

Any “Full Member” or “Educator Member” shall be eligible for “Retired” membership when he or she is no longer considered a permanent employee in the protective and decorative coatings, printing ink industries, or related teaching institutions.

5. Society Honorary Membership:

Any “Full”, “Educator”, or “Retired” member who has rendered significant service to the Chicago Society shall be eligible for Society Honorary Membership.

6. Federation Honorary Membership:

Eligibility for Federation Honorary Membership shall be subject to the By-laws and Standing Rules of the Federation.

B. Executive Committee

The Executive Committee shall consist of the Officers, the two most recent eligible Past-Presidents, ~~the Society Representative Society Liaison~~, and two “At Large Membership Representatives”. If a CSCT member is elected as a FSCT Director, the CSCT Executive Committee may choose to appoint the FSCT Director to serve as a voting member of the CSCT Board for the full term of his or her office. This appointment shall be made by a majority vote of the Executive Committee.

1. The duties of the Executive Committee shall be to:

Act with the President in establishing and executing the policies and administering the affairs of the Society.

Fill vacancies occurring in the Executive Committee, except those of the President ~~and of the Society Representative~~

Society Representative – FSCT Director

Election and Term

~~The “Full Members” shall elect a Society Representative who shall be a “Full Members” of the Society and must also be a “Full Members” of the FSCT. The elected “Society Representative” shall serve for a term of three years, beginning at the close of the Annual Meeting of the Federation in the year of the election.~~

The Executive Committee, if so inclined, may nominate a Full Member, to run for FSCT Director. The nominee must be a Full Member of both the FSCT and a member of the CSCT. Only Full Members in the FSCT shall elect a FSCT Director.

The FSCT Director shall serve for a term of three years, beginning at the close of the Annual Meeting of the Federation in the year of the election.

B. Duties

The duties of the FSCT Representative Director shall be to:

Serve as a member of the Federation Board of Directors.

Report on Federation activity which may effect the operation of the CSCT, to the CSCT Executive Committee without violating his/her obligation to the FSCT as director. Also report on other local society issues which might effect the operation of the CSCT.

~~C. If the office of Society Representative becomes vacant, then a new Society representative shall be elected to a three-year term at the next Annual Meeting of the Society.~~

~~D. Alternate Society Representative:~~

~~The Alternate Society Representative shall be appointed and accredited according the Standing Rules of the Society and the Standing Rules of the Federation:~~

~~During a vacancy in the office of Society Representative, or otherwise in the absence of the Society Representative, the Alternate Society Representative shall perform all of the functions of the Society Representative according the Standing Rules of the Society and the Standing Rules of the Federation:~~

C. Society Liaison

1. The President of the CSCT shall appoint with the Executive Committee's approval a Society Liaison Representative. The Society Liaison Representative must be a member of the FSCT and CSCT. The Society Liaison shall represent the CSCT at all necessary council meetings and report back to the Executive Committee on issues concerning the CSCT and other Constituent Societies.

2. If the appointed Society Liaison Representative is unable to fill his or her duties or the office becomes vacant, than the Second Past President of the current executive board shall assume the duties of the Society Liaison Representative by President appointment with the approval of the Executive Committee. If the second past president is unable to assume the duties of the Society Liaison Representative, than the CSCT President with approval of the Executive committee shall appoint a new Society Liaison Representative.



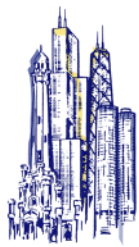
10th Annual Paint A Brighter Chicago

Saturday, August 12th

at the Robert R. McCormick Boys and Girls Club

- DJ at the event
- Raffle off great prizes throughout the day
- Job Well Done Celebration at North Beach

For more information: www.chicagopaint.org



Chicago Society for
Coatings Technology
c/o RUSS HEINZINGER
Schlenk Both Metallica
28252 Darrell Rd
Wauconda, IL 60084

Reminder:
August 28 meeting reservation due 8/24/06
to Patrick Heraty (630) 508-0884
patrick.heraty@degussa.com

Please email Jim Donovan at james.donovan@lanxess.com if your email address has changed or you would like to receive email correspondence from us.

CSCT Calendar of Events 2006

August 28	Eastman Chemical, "Regulatory Update for Chemical Industry" Air Products, "Wetting Agents"	Doubletree Hotel, Alsip* Note Venue Change!
September 18-21	Sur/Fin 2006 - Midwest Airline Center Hall D	Milwaukee, WI - www.sur-fin.net
September 19-21	Powder Coatings 2006 - Indiana Convention Center	Indianapolis, IN - www.pcishow.com
October 2	Luzenac, "Formulating Talc in Industrial & Architectural Coatings" Hexion, "Architectural Coatings"	Monty's Banquets, Bensenville* * Note Venue Change!
October 30-31	Preshow Short Courses - ICE 2006	New Orleans, LA
November 1-3	ICE 2006 - Ernest N. Morial Convention Center	New Orleans, LA - www.coatingstech.org
November 13	Ferro, "New Solar Energy Reflective Pigment Technology"	Doubletree Hotel, Alsip* Note Venue & Date Change!
December 8	CSCT/CPCA Joint Holiday Party	

Double Tree Hotel: 5000 West 127th Street, Alsip, Illinois 60803 (707)-371-7300

Steven's Steak House: Permanantly Closed.

Monty's Banquets: 703 South York Road, Bensenville, Illinois 60106 (630) 595-1780

CSCT OFFICERS 2005-2006

President RUSS HEINZINGER Schlenk-Both Metallica 28252 Darrell Rd. Wauconda, IL 60084 815-444-9916 russell@schlenkusa.com	Vice President MARY SEFFROOD Pan Technology 2564 Prairieview Lane S Aurora, IL 60504 630.484.3810 mseffrood@earthlink.net	Treasurer PATRICK HERATY Degussa - Tego 1763 Flagstone Lane Aurora, IL 60504 630.898.0824 patrick.heraty@degussa.com	Membership Chairman JIM DONOVAN Lanxess Corp. 18843 Center Ave. Homewood, IL 60430 708.647.7660 james.donovan@lanxess.com	Secretary ROBERT MILANO Fitz Chem 450 E. Devon Ave. Itasca, IL 60143 630.467.8383 rmilano@fitzchem.com	Society Representative NATU PATEL Ace Paint Division 20901 S. Central Ave. Matteson, IL 60443 708.720.3118 npatel@acehardware.com
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