

## **KLS-ACS NEWS**

# AMERICAN CHEMICAL SOCIETY KENTUCKY LAKE SECTION

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#### **KLS-ACS Web Page**

http://membership.acs.org/k/ KentuckyLake/index.htm

## **January Kentucky Lake Section Meeting**

at

The Inn by the Lake Gilbertsville, KY Tuesday, January 20, 2009

Social @ 5:30, Dinner @ 6:00, Presentation @ 7:30

The Inn by the Lake is located at 2184 US Hwy 62 (exit 27 off I-24, go south, ½ mile on left)

Price: \$10 (Students \$5)

Country Buffet

### **Presentation:**

"A Macromeric Approach to Environmentally Friendly UV/EB Curable Coatings" by
Dr. Jeffrey D. Rogozinski

Dr. Jeffrey Rogozinski is a Senior Research Associate at Estron Chemical in Calvert City, KY where he develops polymeric products for applications in industry, automotive, aerospace and cosmetics. He is also an adjunct faculty member at Murray State University where his research interests lie in polymeric coatings, particularly those that are environmentally friendly. Dr. Rogozinski also is involved in oil conservation, utilizing waste cooking oil to run his Volkswagon Beetle.



Be sure to visit the KLS website for additional announcements: http://membership.acs.org/k/KentuckyLake/index.htm

If you would prefer to receive the KLS-NEWS via e-mail contact:

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# A Macromeric Approach to Environmentally Friendly UV/EB Curable Coatings

#### Jeffrey D. Rogozinski

**Abstract:** Chances are several times today you touched an object "cured" using either ultraviolet (UV) or electron beam (EB) processing by simply reaching for your morning cereal box, handling a CD or DVD, reading a magazine, using your credit card, typing on your keyboard, driving your car, or just walking on your floor.

UV and EB refers to a special way in which coatings, inks and adhesives are cured or dried using "energy" from these sources, rather than conventional heat. In effect, the ultraviolet light spectrum in a UV lamp and the focused electrons in EB interact with specially formulated chemistries to cure materials--typically more quickly, using less energy and thereby at lower cost than by other methods.

The advantages of UV & EB have been well-documented -- particularly when used with manufactured products that include inks, adhesives and coatings on substrates that are sensitive to heat. In addition, UV & EB is considered environmentally friendly since most of the solvents in inks, paints, adhesives and coatings can be eliminated, thanks to the special capabilities of UV & EB curing.

This presentation will discuss the benefits of UV curing versus conventional curing focusing on a novel "macromeric" approach to ultimate product properties.

## Message from the Chair:

Dear Members,

2008 was an exciting year for the Kentucky Lake Section, particularly with the celebration of our 50<sup>th</sup> Anniversary of our charter. The event was commemorated during National Chemistry Week activities at UT-Martin and reported in the December 1, 2008 issue of C&ENews. Four section members are still on the membership roll and two members, S.K. Airee and James E. Gagen, were in attendance for their 50<sup>th</sup> anniversary!

The Kentucky Lake Section was also awarded a ChemLuminary Award for *Best New Public Relations Program* for the Science Café on alternative fuels that was presented in December 2007. Kudos to Keith Butler for putting this event together and representing the KLS at the fall ACS meeting to receive the award.

The 2009 program will feature two ACS tour speakers and three local speakers from industry and academia nestled in with our favored events, the Area Collegiate Chemistry Meeting (at Murray State this year), the annual fall picnic and National Chemistry Week activities. Additional events this year include the "Women in Chemistry-Career Symposium" and a Science Café, for which funding has been acquired through ACS and Murray State University.

My goal for this year is to get more members involved and on the active list. I will be calling upon our members to volunteer to serve on committees to ensure the continued success of the Kentucky Lake Section. The Career Symposium and the Science Café offer lots of opportunities to get involved at many levels. Drop me an e-mail to let me know how you can lend a helping hand. Be sure to visit the KLS website regularly to stay up to date on all of the KLS activities.

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