



# 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](http://membership.acs.org/k/KentuckyLake/index.htm)

## February Kentucky Lake Section Meeting

at

### University of Tennessee - Martin

Boling University Center  
Martin, TN

Monday, February 16, 2009

Registration: 5:30 Rm. 125

Buffet Meal: 6:00 Rm. 125

Presentation: 7:00 Rm. 206

Price: \$10 (Students \$5)

*Boling University Center*

### Presentation:

***Applied Molecular Modeling:  
Not Just Video Games Anymore***  
by

**Dr. Pete Ludovice**  
Georgia Institute of Technology



Contrary to popular belief, molecular simulations can do much more than produce attractive images to enhance the lobby of the corporate headquarters. These simulations, carried out synergistically with existing experimental programs can produce significant insight into important structure property relationships in materials. The basics of molecular simulation and how it can predict important experimental results will be discussed. The practical approach to how such predictions can be used to produce insight into the rational design of materials with improved properties will also be illustrated through various examples. Molecular simulation examples include photoresist materials for photolithography, mesoporous silicates, and other engineering polymers. These examples are used to illustrate how molecular simulations can not only help interpret experimental results but suggest structural changes that can improve properties.

## Biographical Information

### *Dr. Pete Ludovice*

**Pete Ludovice** received his B.S. and Ph.D. degrees in chemical engineering from the University of Illinois and MIT respectively. After postdoctoral studies at IBM, NASA and the Eidgenössische Technische Hochschule in Zürich, he learned many useful things including how to pronounce Eidgenössische Technische Hochschule. After several years in the simulation software industry he took a faculty position at the Georgia Institute of Technology in Atlanta. He's a Georgia Tech professor by day and stand-up comedian by night. Pete also hosts a local radio show on science and technology called "Inside the Black Box." His research interests include the application of molecular simulation to elucidating structure-property relationships in synthetic and biological macromolecules. Pete tries to bring humor to the classroom and some technology to the comedy club stage to prove that chemical science professionals can be funny and not just funny-looking.

## Message from the Chair:

Dear Members,

The January meeting in Gilbertsville, KY was well attended, despite an unfortunate road closure. Dr. Jeffrey Rogozinsky, of Estron Chemicals, talked about the chemistry behind polymeric products we use everyday and introduced new environmentally friendly methods for the production of these products. This meeting provided a convenient location for our members that are employed with the many industries in that area of our local section. It was great to see them as well as some new faces as members brought colleagues with them. In that vein, I call upon our members to bring a friend/colleague/student to our meetings to foster new relationships that may prove valuable in the future.

I have appointed the chairs of the various committees of the Kentucky Lake Section and their contact information is listed on our local section website. Please feel free to contact the chairs if you would like to assist on any of these committees.

My first initiative this year is to "Put a face on the Kentucky Lake Section." I will be compiling Career Profiles of the KLS members to place on our website. These profiles will be sort of a virtual "meet and greet" for the local section and will also provide information about the myriad of career pathways for those that wish to pursue careers in chemistry. Tell us what you do, how you got to where you are now, and convey your insights for those who may wish to follow your career path. You may want to peruse the ACS site Career Profiles to assist you in preparing yours. Send your profiles to me at the e-mail address below.

Looking forward to seeing you at the February KLS meeting!

*Edie Banner*  
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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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