

2004-2005 Officers

Chair John Moore, Lockwood Greene

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Vice-Chair Ann Marie Jones, Fluor

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Secretary Jim Young, Fluor

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Treasurer David Harshbarger, Fluor

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Webmaster Eugene Gill, Fluor

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Other officers on the Executive Committee are the following members:

- ❖ Rick Vogel (former Chair), Fluor
- ❖ Mary Ferris, Cryovac

It's Candy ... How hard can it be?

We would like to thank Mr. Craig Moyer for his delectable presentations on the process of making Hershey's Kisses and the process changes required to add an Almond.

At first glance, the Hershey Kiss is simply a piece of chocolate candy. Further reflection, however, exposes a less than subtle shape which evolves from a single pointed tip, flowing downward and outward, and expanding through three dimensions toward curved shoulders; finally to a perfectly flat two dimensional bottom. How does this complex geometrical shape come to be? Internal flow properties of chocolate, influenced by sugar, cocoa and milk protein particles suspended in a fat, cause chocolate to flow in this manner. The multi-crystalline nature of the fat and the desire to have a shelf stable product, necessitate processes which promote the growth of only the most stable fat crystals at the time when the shape is formed. To achieve this, the fat and the other ingredients are exposed to thermal treatment or a history which selectively creates stable crystalline seed while melting out those less stable. Given this and a myriad of other attributes associated with the use of a variable raw material base, it's hard to believe that the intricate geometrical shape of a Hershey Kiss is simply the product of squirting a measure of chocolate onto a flat surface. Yet, to the laymen, that is how it has been done for almost 100 years.

Now here's an idea. Let's put an almond inside a Kiss. After all, It's Candy...How hard can it be???

New Officers

Elections are coming up in April for WSC AIChE 2005-2006 officers. Open positions are:

- ◆ Chair
- ◆ Vice Chair
- ◆ Secretary
- ◆ Treasurer

All officers are part of the Executive Committee that plans activities for the year. Total time commitment for each position is only a few hours per month.

If you are interested in being a leader in this exciting organization, please contact one of the current officers to get your name on the ballot.

March Meeting Notice: - **Biopharmaceutical Processing** - **Bob Green**

Mr. Bob Green is a Professional Engineer at Fluor with an MS in Mechanical Engineering. He has been on the board of directors and a presenter at ASME for the past 13 years. He also serves on the board of the Society of Bioprocessing Professionals. Mr. Green will present on two topics related to Biopharmaceutical Processing at the March meeting. (1) An overview of the differences between mammalian cell culture and microbial facilities; with a quick review of recovery and purification areas. (2) An overview of the cell culture process; with emphasis on the comparison of size and production parameters for fermentation systems, as well as peculiarities for respective approaches.

DATE: **Tuesday, March 15, 2005**

TIME: 6:00 p.m. Social
6:30 p.m. Dinner
7:00 p.m. Presentation

LOCATION: Holiday Inn – Greenville
Augusta Road & I-85

COST: \$ 12 Members, \$15 Non-members
Presentation only - Free

DIRECTIONS : I-85 To Exit 46A Augusta Road
Business 25 South

**Please reply to Secretary Jim Young by
Friday, March 11th sec@wscaiche.org**

Science & Engineering Fair

The Greenville County & South Carolina Regional 1A Science & Engineering Fair Junior & Senior Division; sponsored by Roper Mountain Science Center, Rotary Club of Greenville & S.C. Academy of Science, will be held at the Palmetto Exposition Center. Date: Tuesday March 29, 2005

WSC AIChE will provide judges for the fair, as well as several prizes. If you are interested in helping out by being a judge, please contact Rick Vogel at 281-6702 or via email rick.vogel@fluor.com.

Clemson Scholarship

The annual AIChE Clemson Scholarship was presented at the February AIChE meeting. After review of several very qualified candidates Mr. Michael Ammons was selected to receive the scholarship. We appreciate effort each applicant made in this process and look forward to presenting another award next year.

Joint Meeting with Institute of Industrial Engineers

Ashish Shah, Director of Automation Process Technology at Fluor will present on "Integrated Engineering: Streamlining Plant Design Through Automated Software Systems". Meeting to take place at Fluor Campus in Greenville on March 24, 2005 at 6 pm. RSVP to Amy @ (864) 281-6238 or e-mail amy.scholtes@fluor.com. For more information go to the Upcoming Events section of <http://www.upstateiie.com/>

2004 – 2005 Meeting Schedule

Date	Location	Topic
15.Mar.2005	Holiday Inn	Biopharm Processing
24 Mar 2005	Fluor Mngmt Center	Meeting with IIE
19.Apr.2005	Fuji Plant Greenwood	Fuji Plant Tour
17.May.2005	Holiday Inn	Social



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RETURN SERVICE REQUESTED