

**Committee Document-Not for Publication**



**MINUTES**

**CAIG, AATCC Chemical Applications Interest Group**

**Meeting of November 13, 2013**

Committee met at 10:15AM on 11/13/13. Meeting called to order by the Chair, Nelson Houser .

Minutes from May 2013 were approved. 26 attendees

**SPEAKERS:**

Mike Cheek, Huntsman International

Topic: Eriofast™ Dyes for Deep Shades With High Wash Fastness on Nylon/Lycra

- For fabrics with Fine polyamide (micro fibers) with >20% Elastane.
- Traditionally large shade change upon washing and severe staining with standard acid dyes.
- Eriofast chemistry is different , they are anionic reactive dyes. Dye at close to the boil.
- As temperature is risen the dyes react with amine groups on polyamide fiber
- Use of  $\text{CaCl}_2$  is to increase substantivity of dyes (complexation with dyes) but not truly "fixed".
- Not recommended for pale shades.
- Use of linking agent in post dye phase results in vastly improved fastness – reacts with unreacted surface dye and dye inside fiber. Builds a large molecules bound to fiber. Unlike traditional fixing agents, hand is very soft. There is a slight shade change. Rework to correct shade is very difficult once fix is applied. Must check shade before fix step. Could be possible.
- Have a system specific to Blacks, results in high color-constancy.
- Improved color block properties, color sewn against white.

Michael Grigat - Rudolf –Venture Chemical, Inc.

Topic: Water Repellent Technologies, High Performance and Sustainability at the Same Time?

- History of Water repellents: Early products had issues with Durability and Oily Soiling
- Negative press with perfluorinated compounds – some reasonable and some not.

- Analytical techniques are so good can find in sub ppm quantities (ppb, ppt, ppq).
- C6 perfluoro acid found to be not bio accumulative.
- Need fluorinated chemistry if oil repellency desired.
- Fluorocarbon alternatives –two chemistries in hyper-branched molecules, polyurethane and hydrocarbon co-polymers, low-curing temperatures, can also use blocked isocyanates to improve wash durability, can be used in combination with C6 chemistry for high performance.

### **Old Business:**

1. Completed Symposium on “Textile Wet Processing: The Way Forward....to remain competitive and sustainable” on October 16-17 at the Textile Technology Center, Gaston College, in Belmont, NC) with 88 total attendees (registered and speakers). There was a wide variety of attendees including:
  - 28% wet processing
  - 18% chemical/dye suppliers
  - 8% academics
  - 13% merchandisers
  - 16% fiber
  - 17% divided somewhat equally among testing, machinery, systems, environmental, color management, and associations.
2. The CAIG has an informal commitment to hold a workshop/symposium every 3 years – next would be 2016.

### **New Business:**

1. AATCC International Conference in Asheville, NC April 2 – 4 2014. Chemical Applications track is now finalized with three sessions: Coloration, Technology Advances , and Sustainability. This includes 12 presentations and 2 backup presentations.
2. Announced Applied Dyeing Committee meeting at 4PM today.
3. Maria Thiry announced the new on-line Journal and a call for paper submittals.
4. Mike Quante indicated that AATCC will no longer publishing peer review (will be in the on-Line Journal), but we are very interested in any applied technology articles.
5. Next meeting will be at the Spring TCR in May 2104 at the Double Tree Hotel off Paige Road (2 exits east from Technical Center).

Respectfully submitted  
Bert Truesdale, Secretary CAIG

E-mailed to Members