



**AATCC Chemical Applications Interest Group
Minutes of May 6, 2015
R. Michael Tyndall, Chair Presiding**

The meeting was called to order by Chair, Michael Tyndall at 4:00 PM.

The minutes from November 12, 2014 meeting was approved.

OLD BUSINESS

CAIG Student Poster Competition – There has been discussion about a CAIG Student Poster Competition. Presently, the CAIG presents at the International Conference the Herman and Myrtle Goldstein Student Paper Competition. This issue has been referred to the Education Advisory Board (EAB) for further review. No recommendations from the EAB at this time.

International Conference in Savannah – very good program and location. The CAIG sponsored 4 tracks including Sustainability in Textiles (Kanti Jasani, moderator), Herman and Myrtle Goldstein Student Paper Competition (Dr. Fred Cook, moderator), Advances in Wet Processing (Bert Truesdale, moderator), and Advances in Specialty Materials and Finishing (Nelson Houser, moderator). Attendance varied from 20 to 80 with active engagement from the attendees during Q&A.

Chemical Applications Secretary – Bert Truesdale, newly elected President-Elect, has relinquished the CAIG secretary position with the new duties and responsibilities. Nelson Houser agreed to record the minutes of today's meeting.

NEW BUSINESS

International Conference 2016 - Peggy Pickett reported that we will begin to start preparation for the 2016 International Conference to be held in Williamsburg, VA. A CAIG program committee will be selected by M. Tyndall, CAIG Chair.

Activities with the Textile Technology Center - Peggy Pickett reported about recent educational activities with the Textile Technology Center (TTC), Gaston College, in Belmont, NC. AATCC

has used the excellent facilities at TTC for several workshops and symposiums. In the last two years, AATCC has further engaged in discussion with TTC to partner with them on the use of

AATCC educational program. Recently TTC was awarded funding from the State of North Carolina for textile educational training and TTC used three (3) webinars and four (4) test method modules during programs from April 1 to April 30. In addition to the benefit of promoting AATCC educational products, the Association netted \$10,000.

Committee RA92, Interaction of Dyes and Finishes, completed a successful program on *Wet Processing of Textiles with Spandex: Best Practices Conference* held February 11-12, 2015, at the Textile Technology Center in Belmont. A total of 84 were in attendance with a good representation of merchandisers/brands (20%), manufacturing (16%), dye/chemical suppliers (17%), and fiber companies (13%), as well as testing/equipment, academics, consultants, and color systems.

Educational Program Being Developed – Steve Simonson is chairing a symposium on Antibacterial/Odor schedules for September 16-17 at the Doubletree by Hilton (RTP). RA87, Applied Dyeing Theory, is to begin developing a program for 2016 and CAIG will be involved.

Publications – Maria Thiry encouraged members to recommend and/or submit topics and articles for future publications.

New Committee Development – Diana Wyman has received much interest in developing a committee focused on “Smart Technology.”

LinkedIn Topics – Nelson Houser suggested someone capturing technical topics from LinkedIn that could be summarized (when the conversations are concluded) to a one-page technical topic. There are a lot of good topics/problems (and some demonstrating the need for basics of wet processing and AATCC test methods) that can be helpful to all of our members. This could be something that some of the Associations retirees might champion. A question was raised if there would be any restrictions preventing AATCC from converting to an article. Michael Quante is to investigate if any problems.

Green Chemistry Conference – Mike Tyndall reported on attending a “green chemistry” conference in Portland, Oregon. Well attended by a wide cross-section of industries and disciplines that focused on engineering/reengineering chemicals for greater sustainability. This is a future topic for the Associations’ engagement.

PRESENTATION

Mike Tyndall gave a presentation on *Durable Press without Formaldehyde*. Formaldehyde is ever present and all-around us. Found occurring naturally in foods, plants, animals, fish, etc., one may find up to 20-25 PPM formaldehyde at any time when testing.

The formaldehyde market is “money” and valued at \$13.5 billion with end-uses including wood, paper, plastics, automotive, cosmetics, shampoos, and textiles. Surprisingly, of that \$13.5 billion market, textiles only represents 2% (\$270 million).

While formaldehyde can be found in many textile wet processing products, the resin finishing application draws the biggest attention as a formaldehyde source. Also, formaldehyde finds itself on most all environmental restriction lists because of its carcinogenic properties.

Illustrated in the presentation were several approaches to “acceptable” and “no” detectible limits of formaldehyde. Using the typical DMDHEU resin, the following two methods were discussed. First, giving an “after wash” after resin finishing can reduce the residual formaldehyde level. This can significantly reduce to less than 50 PPM formaldehyde. While an additional processing step, companies in Asia are doing this. A second approach is to include a “scavenger” in the resin finish bath. Two “scavengers” were illustrated to point out “know your product” as one did a good job of reducing the formaldehyde while the other did a poor job of controlling formaldehyde and also impacted the crease retention angle. A well selected scavenger and application can reduce formaldehyde up to 75-85%.

Lastly, Mike reported that evaluations are underway on a new resin chemistry and application that would offer “0” levels of formaldehyde; that is, “0” representing that there is no detectible formaldehyde above the detection limit of the test.

An excellent presentation was followed with a variety of questions.

CONCLUSION

Mike asked the CAIG members to submit their ideas for future topics at the CAIG committee meetings. With no other business, the meeting was adjourned. The next scheduled meeting will be November, 2015.

e-mailed 10-6-15