



**AMERICAN ASSOCIATION OF TEXTILE CHEMISTS AND COLORISTS  
TECHNICAL COMMITTEE ON RESEARCH (C3)**

**Report of the 340th Meeting  
Wednesday, November 11, 2009 – 5:45-6:45 pm**

The 340th meeting of the Technical Committee on Research took place on Wednesday, November 11, 2009. Elizabeth Eggert, TCR chair, convened the meeting at 5:35 pm.

The following members were present:

Elizabeth A. Eggert TCR Chair  
Rembert J. Truesdale III, TCR Vice Chair  
Christopher S. Leonard, TCR Secretary

Martin J. Bide  
Fred L. Cook  
John Y. Daniels  
Thomas Fabian  
Leonard T. Farias  
Kenneth Greeson  
Peter J. Hauser  
Paul L. Johnson

Norma M. Keyes  
Calvin Lam  
Robert K. Lattie  
Richard A. Malachowski  
Susan L. Matter  
Shawn P. Meeks  
Luther M. Myers  
Nancy PeBenito  
David L. Ramey

James A. Sheets  
Richard S. Simonson  
Richard Slomko  
Alfred K.F. So  
Jerry G. Tew  
Adam R. Varley  
Michele L. Wallace  
Heidi Woodacre

**Others Present:**

Aaron Creech  
Tricia F. Day  
Mason Epperly  
Judy Holden

Suzanne Holmes  
Smrithi Kumar  
Angela Massengill  
Carrie McDermitt

Punita Patel  
Peggy J. Pickett  
Elizabeth Turnbull  
Diana Wyman

**Announcements:**

Chair Eggert announced upcoming symposia, one being the Fashion Trends, Technologies, and Sustainability in Denim and Garment Wet Processing to be held December 9-10, 2009 in Long Beach, California. Also she announced AATCC Global Conference & Exhibition "Emerging Trends in Textile Processing for a Sustainable Future," to be held January 28-30, 2010 at the Bombay Textile Research Association in Mumbai, India.

Eggert also announced the change in the spring committee meetings for 2010 only. The dates will be March 23-25, 2010 at the Radisson Hotel, Research Triangle

Park, N. C. The committee meetings are being held in March to allow AATCC to hold their annual International Conference in conjunction with the MegaTex show in Atlanta, Georgia. The AATCC International Conference will be held May 18-20, 2010 at the Georgia World Congress Center in Atlanta, Georgia.

Eggert also announced that the 2010 TCR Service Award recipient has been chosen and will be announced at the AATCC International Conference in May 2010.

**RA23, Colorfastness to Water:** A committee ballot will be submitted for TM 104 (Colorfastness to Water Spotting) with revisions on specimens to specimen; adding tolerance to specimen size, and add to scope that "whites can also exhibit color change, such as yellowing." The interlaboratory trial for TM 162 (Colorfastness to Water: Chlorinated Pool) has been completed. Chris Leonard of AATCC will summarize data to send to the committee for review to determine if the data can be used for a precision and bias statement and/or add an option using smaller canisters. The interlaboratory trial for TM 107 (Colorfastness to Water) has been conducted to determine if the testing time can be reduced from 18 hours. Data shows that staining changes over time. A poll of the labs participating will be done. Leonard will summarize data and send out to the committee. A change in the protocol for the next round will use distilled water or deionized water and instead of boiled water distilled or deionized. A poll will also be taken regarding what type oven the labs are using in the proficiency testing for perspiration. A question came up on should TMs 15, 106, 107 and 162 apply to white fabrics? The committee proposed an addition to the scope for new or reaffirmed methods that whites can also exhibit color change such as yellowing.

**RA24, Fiber Analysis:** A recent TCR ballot for proposed revision of TM 20-2007, Fiber Identification: Qualitative, to reflect an addition in the development statement stating that it is "Related to ISO Document 2076," and that Lyocell is being deleted from the *Man-Made List of Fibers* as it is already listed under *Rayon* as well as a reference to China's Document GB 16-2262, was approved and will appear in the 2011 AATCC Technical Manual. A recent TCR letter ballot for proposed revision of TM 20A-2008, Fiber Analysis: Quantitative, to reflect a ruggedness test provided by the Spandex Subcommittee to develop a solvent separation procedure 8 using Dimethylacetamide and other editorial and minor technical changes, were approved and will be published in the 2011 AATCC Technical Manual. All negatives were resolved for these two items. Results of the most recent 71 lab international proficiency testing were reviewed. A significantly reduced amount of both interlab and intralab variation was observed in the no finish mohair/wool blend as compared to the heavy finish add on blend analyzed in the previous proficiency testing. The spandex/cotton blend proficiency testing showed good agreement both between and within labs. Blends for the upcoming proficiency testing were determined to be acrylic/wool and camel/wool. An extraction note concerning the mohair/wool heavy finish sample will be distributed to committee members. A statistical analysis by Robert Cleaver of the RA102, Statistics Committee, indicated that data from the AATCC proficiency trials can be used to provide a Precision and Bias Statement for a particular blend type, using data from the 80 lab international Acetate/Rayon proficiency testing as an example. Two new subcommittees were created: the Differential Scanning Calorimetry (DSC) Subcommittee comprised of FITI, Clemson University and Vartest;

and the Cationic Dyeable Polyester Subcommittee comprised of FITI, Fred David and Vartest. Data from DuPont concerning triexta fiber was reviewed and suggestions for inclusion of triexta into TMs 20 and 20A will be sent to committee ballot. DSC data provided by DuPont will not be included until the DSC Subcommittee has completed work on developing a standard DSC protocol for inclusion in either method or both. Communication will be made with Dow/Cargil/Natureworks so that information concerning PLA can also be included in TMs 20 and 20A. The proposed new Color Supplement to TMs 20 and 20A was reviewed with the current contents including: first order red plate images of generic fiber types; examples of AATCC multifiber strips stained with fiber identification stain; examples of energy dispersive x-ray maps of metallic fibers with inductively coupled plasma analysis also supplied; listing of \*.SP Fourier transform infra red files available from AATCC; and table of proficiency testing coefficient of variations for various fiber blends.

**RA31, Antimicrobial Activity:** A proposed revision of TM 174 (Antimicrobial Activity Assessment of Carpets) has had two outstanding negatives on the issue of shaving carpet fibers. Two solutions were provided to address the negatives: (1) remove the AATCC TM 174 from the manual; or (2) reference the sample preparation only from an ASTM E 2471 test method which allows for shaving of carpet fibers prior to testing. It was decided that the first solution was not an option and the second solution was an acceptable option. The committee needs a vote on this in the next 45 days. Three committee members have agreed to review this method and add the reference to ASTM E 2471, plus clean-up some editorial issues. Once this is completed it will be sent to committee ballot. TMs 30 (Antifungal Activity, Assessment on Textile Materials: Mildew and Rot Resistance of Textile Materials), 147(Antibacterial Activity Assessment of Textile Materials: Parallel Streak Method) and reactivation of TM 90 (Antibacterial Activity of Fabrics, Detection of: Agar Plate Method) have current and pending ballots which are in the process of being updated. Round robin test samples on a proposed Hydrophobic Fabric Method were sent to David Ramey of Microban and chair of RA31. The samples have had issues of being too hydrophobic; however, when washed the antimicrobial properties are also washed out or lost. Some preliminary testing will be done on the samples prior to sending them out for the round robin. Bill Hanrahan was nominated for committee chair beginning January 2010. Beth Joiner of NASMA is acting secretary. Proficiency test programs for AATCC Methods 100 (Antibacterial Finishes on Textile Materials: Assessment of) and 147 were discussed and anyone interested in participating was asked to let David Ramey know. AATCC plans to launch this program in October 2010. Guidelines for testing will be provided to each participating lab with test samples with six weeks to complete the work. Samples will be sterilized prior to distribution and will most likely be cotton/poly blend supplied by Cotton Incorporated.

**RA33, Colorfastness to Atmospheric Contaminants:** Lot 20 control fabrics have been approved for TM 23, Colorfastness to Burnt Gas Fumes, and it is now available from Testfabrics. Data (from seven labs) will be used for a precision and bias statement and will be sent for committee ballot for reaffirmation with the P&B statement. Two negatives for a proposed committee ballot for TM 109 (Colorfastness to Ozone in the Atmosphere under Low Humidities) were resolved. The method will be re-balloted to committee

expanding the ozone concentration and time. AATCC needs to review the instrumental endpoint of the control fabric for TM 129 (Colorfastness to Ozone in the Atmosphere under High Humidities). AATCC is waiting for results from one of the three labs. There may be a need to edit the end point in the method to reflect reality. Data from the round robin for TM 164 (Colorfastness to Oxides of Nitrogen in the Atmosphere under High Humidities), will generate a precision and bias statement which will undergo a committee ballot.

**RA34, Preparation:** The committee is working on a proposed revision of Method 89 (Mercerization in Cotton). TM 89 needs to be revised to include an auto-titration and an option for instrumental analysis. There is a concern that fabrics treated with liquid ammonia may interfere with such instrumental analysis. A study will be conducted prior to this revision being balloted. The committee would like to post a note in *AATCC Review* and the *AATCC Newsletter* asking for labs and interest in updating this method. Comparison of ISO 3071 (pH by Shaker method) to AATCC Method 81 (pH by boil-down) was done by FITI in Korea. It was stated that there is a need to show that the two methods are not the same and that a statement should be added to TM 81 stating this method is not applicable to finished textiles. Ken Greeson will work with Len Farias, chair of RA34, on this revision. There will be an interlab study conducted in 2010 with a re-write of Method 81. The presentation from David Hinks of North Carolina State University presented "Green Chemistry for Bleaching of Cotton," which is a unique approach to the use of activators for hydrogen peroxide bleaching, was well received.

**RA36, Color Measurement:** EP9 (Visual Assessment of Color Difference of Textiles) was re-submitted to committee ballot and a TCR ballot and was approved. Changes will appear in the 2011 AATCC Technical Manual. Proposed revisions of EP8 (AATCC 9-Step Chromatic Transference Scale) to set color coordinates and tolerances for the 9-Step Chromatic Transference Scale was balloted to committee and TCR and was approved. Changes will be reflected in the 2011 AATCC Technical Manual. A proposed new evaluation procedure on the "Instrumental Calculation of the Gray Scale for Staining" underwent a re-write and was submitted for both committee and TCR letter ballots and was approved. The new evaluation procedure will be published in the 2011 AATCC Technical Manual. A discussion of EP11 (Spectrophotometer UV Energy Calibration Procedure for Optically Brightened Textiles) and TM 110 (Whiteness of Textiles) on the use of SCI and SCE rendered a decision to collect more information. It was also decided to add a photograph to the procedure to show proper placement. The EP11 has a study underway to validate target CIE whiteness value. It was decided to wait on the proposed revision of EP11 and do both at the same time. TM 182 (Relative Color Strength of Dyes in Solution) is up for reaffirmation. Comments will be requested from committee members. Data for the proposed lighting study for 3500K light sources is still of interest to the committee. David Hinks will investigate creation of a master's student project.

**RA38, Colorfastness to Crocking:** The committee discussed the white crock square test cloth, as a result of another discussion about thread count tolerance. Testfabrics suggested broadening the tolerance of fabric weight. The committee feels that weight

cannot be changed without doing a study which would include AATCC and ISO crock cloth. The "blind" crock study will be done by Natick Labs. SDL Atlas and James Heal Co. will provide fabric for the study. Susan Gasset of Natick, chair, will bring results to the next committee meeting. Visual and spectro readings/measurements will be done. Widening the whiteness tolerance of the crockmeter cloth will be looked at as part of the study. A verification cloth for TM 116 (Colorfastness to Crocking: Rotary Vertical Crockmeter Method) is being looked into. A question was raised to the committee about crocking whites with colored test cloth. The committee decided that this is a different test method and that ASTM may have a method that addresses a similar procedure. Susan Gasset was re-nominated to be chair beginning 2010.

**RA42, Dimensional Change:** TM 179 (Skewness Change in Fabric and Garment Twist Resulting from Automatic Home Laundering) has been separated into two proposed methods, which will require precision and bias statements. The proposed drafts will be sent to the committee for review only along with data set for a proposed P&B. The chair will contact Jodie Lynch and request a draft of the proposed new sock and hosiery test method for dimensional change to be sent out to the committee for review only.

**RA43, Professional Textile Care:** TMs 86 (Drycleaning: Durability of Applied Designs and Finishes) and 158 (Dimensional Changes on Drycleaning in Perchloroethylene Machine Method) are due for reaffirmation and will be coordinated through RA43. Mack Davis of Medlin Davis Inc. presented a talk on "Green Earth Cleaning," which was well received.

**RA50, Colorfastness to Light:** The committee is continuing to split the proposed revision of TM 16 (Colorfastness to Light) into three parts, Carbon, Xenon and Outdoor, per the request of Committee RA99, Technical Manual Editorial Review. Regarding the Blue Wool Update, nylon flag material looks promising. The committee also agreed to investigate a wool material. The ISO 105-B10 ruggedness test approves use of flat bed testers. The new chair will be Lisa Strachan beginning 2010 and Rich Slomko will be secretary. It was announced that AATCC has relinquished secretariats of TC38-SC1 and SC2. Also announced was that ISO 105-B08 has been revised.

**RA56, Stain Resistance:** The acting chair of RA56, Paul Johnson with 3M Co., has tried to resolve several negatives on a recent TCR ballot for proposed revision of TM 130 (Soil Release: Oily Stain Release Method). One negative has now been resolved; however, Johnson is still pursuing the other negative. There was a request for additional stains to be addressed by a reference to ASTM Method D 4265. The committee will develop core variables for assessing protocol for test method for High Efficiency front loading machines. There is a potential for developing a proficiency program for TM 130. A pilot program will be put on hold until the TM 130 revision is completed and published. Paul Johnson was re-nominated as chair of RA56 beginning January 2010 with Mark Granja of Sun Products as secretary.

**RA57, Floor Covering:** AATCC TMS 121 (Carpet Soiling: Visual Rating Method), 138 (Cleaning: Washing of Textile Floor Coverings) and 171 (Carpets: Cleaning of: Hot

Water Extraction Method) are due for reaffirmation. These were discussed and approved to move forward to TCR ballot for reaffirmation. Richard Turner will organize an interlaboratory trial for a new bleach resistance test method. Alan Buttenhoff will organize an interlab trial for the new moisture permeability method. Turner will also organize an interlab trial for static charge analysis of carpets. Bijan Seyfzadeh reviewed his work on an alternative method of making the Red Dye 40 Scales. The product he exhibited looked quite promising and would be much less labor and cost demanding. Volunteers for new chair were requested but no one volunteered. Alan Buttenhoff will continue as acting chair until a new chair can be found.

**RA59, Fibrous Test Materials:** There was a discussion about the effects of the ECR equipment listing policy concerning test methods that include references to multifiber fabrics. There was a motion to send a request to the chairs of the committees that have methods with multifiber fabric to include the following statement, "in accordance with Evaluation Procedure 10, Multifiber Adjacent Fabrics: Evaluation of." A request will also be sent to all committees with ballast fabrics to propose technical and editorial changes regarding table descriptions of those fabrics. A request will be sent to Committees RA38 and RA57 that they propose possible synchronization of crockmeter fabric specifications in their methods and ISO related test methods. The committee is still waiting for Carol Graham's review of AATCC EP 10 for consideration in ISO 105-F10. RA59 is also waiting for staining results of proposed single fiber adjacent acetate fabric.

**RA60, Colorfastness to Washing:** TMs 61 (Colorfastness to Laundering: Accelerated), 172 (Colorfastness to Powdered Non-Chlorine Bleach in Home Laundering), 188 (Colorfastness to Sodium Hypochlorite Bleach in Home Laundering) and 190 (Colorfastness to Home Laundering with Activated Oxygen Bleach Detergent: Accelerated) were balloted to committee and TCR for inclusion of liquid detergent and all were approved. These changes will appear in the 2011 AATCC Technical Manual. Numerous comments and modifications were received regarding the format of TM 61. A task group has been formed to review and make these changes. The group will meet soon in order to get a committee ballot out in December. Norma Keyes has agreed to act as chair for RA60 until a permanent replacement can be found.

**RA61, Appearance Retention:** A training video for TM 124 (Smoothness Appearance of Fabrics after Repeated Home Laundering) was provided by Cotton Incorporated and reviewed by Peggy Pickett and Chris Leonard of AATCC. It was discussed that the video needs to be formatted to be included as an eLearning module. The current video focuses on key points but does not cover all details needed for an actual training video. It was also discussed that all the test methods related to RA61 should be included. Ken Greeson, chair, will work with Pickett on this item. The committee is waiting for input from David Hinks of NCSU regarding the light intensity project. Greeson will look into this and also check the material list in the Figure 1 description for lighting. It was discussed that all the RA61 methods should be included in this project. The proposed ballast change in TMs 88B (Smoothness of Seams in Fabrics after Repeated Home Laundering), 88C (Retention of Creases in Fabrics after Repeated Home Laundering), 124 and 128 (Wrinkle Recovery of Fabrics: Appearance Method), for Type 3 in Table I-Wash Load

Ballast: Finished Fabric Specification, should be changed to Fabric Specification and further classified as Greige and Finished specs. Yarn tolerance change was also discussed for Type 1 and Type 3; the yarn for Type 3 will be 16/1 ring spun instead of 30/2 ring spun in the future. Greeson will discuss with Leonard regarding changes required for Table I. The angles of grading board for these methods were discussed as well. An update from John Crocker and Norma Keyes for the angle calculation was given but it was discussed and approved to remove angle information and keep only dimensions from Figure 1. Greeson will work with Leonard on this proposed change. The discussion of a new test using the Dynawash for accelerated testing for durability on prints and applied designs such as glitter and rhinestones was tabled until the March 2010 meeting. New business entailed RA61's methods' tables for laundering conditions either need to be constantly changed or remove them and put a note to refer to the current standards of home laundering test conditions monograph. Also, Cotton Incorporated has an Automated Crease Recovery Angle tester that can be used for TM 66 (Wrinkle Recovery of Woven Fabrics: Recovery Angle). A preliminary study was conducted in which the automated tester was compared to TM 66 data on the same fabric (tested at the University of Georgia), and the results were encouraging. A survey will be conducted for the committee to determine the level or interest for adding an automated option to TM 66. RA61 will have a speaker to be confirmed for the March 2010 meeting.

**RA63, Water Resistance, Absorbency and Wetting Agent Evaluation:** AATCC TMs 17 (Wetting Agents, Evaluation of), 22 (Water Repellency: Spray Test), and 70 (Water Repellency: Tumble Jar Dynamic Absorption Test) are due for reaffirmation in 2010. These methods were discussed and approved to go forward for a TCR ballot for reaffirmation. Precision and Bias data has been collected for the current TM 79 (Absorbency of Textiles) and the proposed Option B protocol. Data presented to the group demonstrated statistical significance. Once the P&B data analysis is complete, the proposed revision will be sent to committee ballot. Regarding the proposed new methods on Wicking of Textiles, Precision and Bias data has been collected for the vertical and horizontal sample orientation protocols. Analysis of the data collected for the horizontal orientation protocol has been completed and is ready to move forward to a committee ballot when the P&B statement is completed. Analysis of the data collected for the vertical orientation, however, revealed that further analysis is needed to correctly interpret initial and final condition measurements. In order to not delay the balloting of the horizontal orientation, the committee decided to separate the two proposals into two proposed methods. Three test method proposals on Drying Time were discussed by the group: (1) a new method proposed by Cocona Incorporated based on the ATS (gravimetric mass loss); (2) the previously proposed gravimetric mass loss rate method; and (3) a new method proposed by Cocona Inc. based on temperature differences induced by evaporative cooling rate. The three proposed methods will be distributed to the committee for commenting along with notice of formation of a subcommittee to review various drying time methods. The subcommittee will review all comments at a web conference in December. The subcommittee will also meet during the spring meetings in March 2010 prior to the full RA63 committee meeting. Michele Wallace was nominated as the new chair beginning January 2010.

**RR68, Odor Determination Test Methods (Exploratory Reactivation Meeting):** An exploratory reactivation meeting of Reference Committee RA68, Odor Determination Test Methods, with Adam Varley of Vartest acting as chair, was held to discuss possible reactivation, revising/updating Test Method 112 (Formaldehyde Release from Fabric, Determination of: Sealed Jar Method), and discussing other CPSIA issues that may affect the members of the Association. It was unanimously decided to reactivate RR68 as well as RR45 (Finish Analysis Test Methods) and to have both meet jointly in March 2010 in order to accommodate the need for both low level formaldehyde detection as well as odor issues which may or may not be formaldehyde related. Michele Wallace of Cotton Incorporated was designated as the person responsible for determination of possible committee chairs. The possibility of ultimately merging the two reactivated committees was also raised. The attendance list for the meeting was given to Tricia Day of AATCC so that a formal list of RR45 and RR68 members can be assembled. An e-mail with a committee application blank will be submitted to those in attendance for interested persons to join the committee. RR68 noticed several areas in TM 112 that requires upgrades to improve the method and decided to review possible text upgrade alternatives at the March 2010 meeting. The advantages of adding a water extract alternative to air incubation was brought up as a point to be continued during discussion as was the advantage of reducing aliquot size. RR68 determined that running a ruggedness, precision and bias and/or proficiency trial focusing on lower levels of formaldehyde around 150 ppm or less would be very useful and will be on the agenda for the March meeting. RR68 determined development of a new Formaldehyde in Textiles Monograph or a note on proper use of Method 112 added to the method would be very useful. Alternatives for this text will be reviewed at the March meeting. It was noted the increasingly common presence of analytical instruments such as GCMS and HPLC in textile testing laboratories worldwide means that both RR45 and RR68 have a new and more sophisticated technical environment and membership to work with and that more sophisticated and effective test methods and related documents will, therefore, be anticipated by the committee's activities. (Secretary's Note: The action to reactivate RR68 and RR45 was approved by ECR at their meeting of November 12, 2009.)

**RA75, Correlation of Laboratory Tests with End Use Performance:** The committee letter ballot for proposed new name and scope of RA75 received one negative and comments from another. The chair will contact the negative voter to try and resolve the negative and reballot to committee the proposed new name and scope. The Moisture Management test method was discussed. Variables of different fabrication, fibers, structures and finishes may perform differently and how to handle these issues with buyers and marketing. A discussion on the resolution of yellowing of foam brought adding a summary to notes for future reference. Regarding the reactivation of the Odor committee, a discussion of odor on garments ensued. Suggestions were made about formaldehyde testing, checking containers for spraying and other products that may be shipped with textiles.

**RA87, Applied Dyeing Theory and Characterization of Dyes:** RA87 noted that

AATCC does not have a test method for soluble dyes (dye solubility). The chair will research ISO methods in this area. Possible three candidates are ISO 105-Z07, Z08 and Z09. Bert Truesdale, chair, will look into these three methods in detail prior to the March meeting. TM 184 (Dusting Behavior of Dyes: Determination of) is due for reaffirmation for the 2011 Manual. It was approved to send to TCR for ballot. There are six other methods to be reviewed for the 2012 Manual (TMs 140, 146, 154, 170 and 176). These will be looked at in the coming year.

**RA88, Home Laundering Technology:** New top loading washing machine parameters have been approved through committee and TCR ballots to update Table II of the “*Standardization of Home Laundry Test Conditions*” monograph. These changes will appear in the 2011 Technical Manual. Committees that have methods that include home laundry test conditions will need to update their conditions or reference the updated monograph. The committee also agreed to ballot standardized front loading washing machine parameters based on the most popular model in US consumers’ homes. These front loading standardized conditions are expected to continue changing, but these initial conditions will give us a starting point for updating the AATCC HE standard detergent. The RA88 subcommittee investigating the potential use of programmable machines to mimic the performance of in-home front loading washing machines reviewed an initial test plan with the committee and agreed to send out a detailed test plan for feedback before the next committee meeting. The RA88 committee recommended a change to ECR policy to clarify that the AATCC website listing of appliances that meet the *Standardized Home Laundry Test Conditions* is for consumer appliance manufacturers only. Other companies offering equipment that meet these standards will continue to be listed in the AATCC’s Buyer Guide. A new test method for measuring energy usage in a dryer was proposed to the RA88 committee. It was determined that RA88 was not the correct forum for the new method as RA88 does not create methods.

**RA89, Hand Evaluation:** RA89 reviewed the proposed new test method titled “Fabric Hand: Relative Hand Value of Textiles; Instrumental Method.” Many changes were made to improve the clarity of the method. The task group recommended that the proposed draft be circulated to committee members for review while an interlab study is performed for the purpose of developing a precision and bias statement, followed by the draft being submitted for committee ballot. The outline of the initial precision and bias study for the proposed method was not considered useful as the method calls for a reference fabric to be used for the RHV to be determined. A new study outline will be developed for the committee to consider at the March 2010 meeting.

**RA99, Technical Manual Editorial Review Board:** RA99 did not meet during these series of meetings. However, the following actions took place relating to the committee and should be reported. Committee RA99 has recognized that many of AATCC's colorfastness tests: a) contain redundancies relating to the use of the gray scale; and b) should indicate that precision statements in colorfastness test procedures are based on the use of EP1 (Gray Scale for Color Change), and that the methods should include a note that the use of EP7 (Instrumental Assessment of the Change in Color of a Test Specimen) would result in changed (presumably improved) precision of the overall. The

following methods were balloted to committee and TCR ballots and approved to add references to the AATCC Gray Scale, the AATCC 9-Step Chromatic Transference Scale and the AATCC Gray Scale for Staining, and delete the individual steps currently listed. In some cases the evaluation procedure and report sections are affected. Since these proposed revisions were approved, all remaining test methods needing this change will be balloted to TCR in January 2010. The methods approved by this TCR action are AATCC Test Methods 117-2009, Colorfastness to Heat: Dry (Excluding Pressing); 119-2009, Color Change Due to Flat Abrasion (Frosting): Screen Wire Method; 120-2009, Color Change Due to Flat Abrasion (Frosting): Emery Method; and 133-2009, Colorfastness to Heat: Hot Pressing.

**RA100, Safety, Health and Environmental Technology:** The committee has been working on a proposed new title and scope of RA100. The proposed title and scope received a negative at committee stage. James Reed with the DLA Headquarters spoke on “DLA Hazardous Minimization (HAZMIN) Program.”

**RA103, Spectroscopic Technologies:** Pat Sells of Thermo Scientific presented an excellent talk on hand-held X-ray fluorescence instruments for measuring elements in materials.

**RA104, Garment Wet Processing Technology:** The upcoming Fashion Garment Washing Symposium was discussed. Swain Bennett of Clariant gave a talk on “Advance Denim.”

**RA106, UV Protective Textiles:** Proposed revision of TM 183 (Transmittance or Blocking of Erythemally Weighted Ultraviolet Radiation through Fabrics), will be balloted to committee by the middle of December to add a precision and bias statement, and to add “notes” or addendum referencing ASTM labeling guide and exposure methods. Thermo Fisher Scientific offered to take over the development of a spectrometer to replace the LabSphere and develop a stretched fabric sample holder for a proposed test method on “stretched fabrics.” In order to proceed, they would need guidance from the committee on the mode of stretching; i.e., single axis stretch, two axis stretches, and radial stretch. Further discussion on the topic indicated a lack of committee interest so the project has been tabled for a second time. Regarding the proposed *AATCC UV Protective Textiles Products Technical Supplement*, an overview of the UV protective product testing and related articles will be added to the Notes section of TM 183. The current chair’s term expires at the end of 2009. Nominations are needed for a new chair to start in January 2010. No nominations were suggested.

**RA109, Flammability Technology:** The committee had a discussion of the overdue or withdrawn ASTM standards D 4151 and D 6413.

**RA110, Nonwovens Technology:** There was no meeting of RA110. However, it should be noted that a TCR Ballot to disband RA110 and suggest it become a subcommittee of the AATCC Materials Interest Group, was approved. Therefore, RA110 is disbanded.

**Time and Place of next meeting** The next series of committee meetings will be held during the spring series of meetings on March 23-25, 2010 at the Radisson Hotel/AATCC Technical Center in Research Triangle Park, N. C. Check our website in mid-December at <http://www.aatcc.org/testing/committees/index.htm> for more details.

**How to Participate:** For information regarding these meetings and how to take part in committee work, contact Tricia F. Day, AATCC technical assistant, P.O. Box 12215, Research Triangle Park, N.C. 27709; tel: +1 919 549 3534; fax: +1 919 549 8933; e-mail: [dayt@aatcc.org](mailto:dayt@aatcc.org).

Respectfully submitted,

*Christopher S. Leonard*

TCR Secretary

Signed: \_\_\_\_\_ (Liz Eggert) \_\_\_\_\_  
Elizabeth Eggert, Chair TCR

11/30/09