AATCC Research Committees met for the Fall 2023 Committee Meetings on November 7-9, 2023 at AATCC Headquarters in Research Triangle Park, NC.

RA: Research committee (Active)
ECR: Executive Committee on Research
TCR: Technical Committee on Research
TM: AATCC Test Method
LP: AATCC Laboratory Procedure
EP: AATCC Evaluation Procedure
M: AATCC Monograph
P&B: Precision & Bias

Executive Committee on Research

- Meetings attendance totaled 64 onsite and 144 remote participants. A survey will be distributed to note what influenced attendees’ reason for selecting mode of participation.
- C2S4 Report: MOU finalized. Diana Wyman, AATCC, is also working on a document to scope which projects will fall to AATCC, and which will fall to ASTM. Co-located meetings are being held and are well received.
- The Chlorine Control fabric was approved with plans to be available by the end of December 2023.
- New Committee RA115: PFAS (Per- and poly-fluoroalkyl substances) Test Methods is established with chair, Dennis Scheer, SST Technology Solutions; and Secretary, Gregg Woodcock, HanesBrand. The Committee’s Scope is to establish testing procedures that can accurately measure the quantity of per- and
poly-fluoroalkyl substances (PFAS) in textiles and clothing. This includes conducting research, offering guidance, and fostering dialogue about the presence of PFAS in these materials.

Technical Committee on Research

RA23, Colorfastness to Water

Committee discussion noted that AATCC TM15 – Colorfastness to Perspiration need review for update.

TM104- Colorfastness to Water: Spotting is overdue. Members are working on the images before submitting to ballot.

TM06 - Colorfastness to Water: Sea is overdue, and a P&B is needed.

TM162 - Colorfastness to Water: Chlorinated Pool needs extensive work and a P&B.

The committee reviewed new method -Colorfastness to Water: Bromine (Spa's and Hot Tubs) – to address the question of whether the temperature should be higher than Chlorinated Pool Water at 70F? So 104+/-2F as recommended by the CPSC {100-104F) □CA. □«2-□ c-1" }DI...f ·f ± 5□ Will utilize AATCC Communities page for review and feedback.

RA24, Fiber Analysis

The committee reviewed Proficiency Testing trial results from August 2023. There was a call for proficiency testing suggestions for fiber content ideas that included cotton/rayon blends and metallic blends. The 2024 PT is offered in February with a report being available prior to the Spring 2024 meetings.

Chair, Joseph Lin will collaborate with committee and AATCC staff for decision to address ASTM D629 and D276.

RA31, Antimicrobial Activity

The committee discussed submitting AATCC TM30, Test Method for Antifungal Activity, Assessment on Textile Materials: Mildew and Rot Resistance of Textile Materials with an
addition section that AATCC provides another inoculation protocol; fungal score culture to fabric.

Other discussions included textile pre-testing procedure for scouring, extended committee scope including odor control methods; Standard untreated controls as internal and external performance validation needing no antibacterial properties on fabrics.

**RA32, Static Electricity**

Guest speaker, Shane Burns of Electro-Tech Systems Inc., hosted a presentation.

Shane gave an insightful, educational presentation on the Static Decay and Surface Resistivity test methods which highlighted some areas of how they apply to this committee’s goals.

**RA33, Colorfastness to Atmospheric Contaminant & RA59, Fibrous Test Materials**

AATCC staff, Garry Atkinson presented on AATCC TM129 Test Method for Colorfastness to Ozone in the Atmosphere under High Humidities, Nylon Sleeve Lot 11, now available.

**RA34, Preparation**

Committee did not meet.

**RA36, Color Measurement**


**RA42, Dimensional Change**

Committee held a discussion regarding the possible plan for a new test method to replace AATCC TM96, Test Method for Dimensional Changes in Commercial Laundering of Woven and Knitted Fabrics Except Wool. The change is needed because the equipment is no longer available and TM96 has been discontinued. The current plan is to develop a method using the Wassacator with parameters/setting like TM96 as starting point.
RA43, Professional Textile Care
Committee did not meet.

RA45, Finish Analysis
New fabrics have been prepared and treated for the Precision and Bias statement portion for AATCC TM206, Test Method for Free and Hydrolyzed Formaldehyde: Water Extraction. A worksheet and fabrics will be mailed to volunteers with a request to submit for approval of suggestion to use laundrometer to test formaldehyde, especially to wet out hydrophobic fabric samples.

Formaldehyde tests, TM112 and 206, now have an option of using HPLC to determine concentration. If equipment is available, then volunteers for the Precision and Bias testing will also provide HPLC data.

RA49, Insect Resistance
The committee discussed highlights of the Fall 2023 Digital Lab before moving into conversation regarding mint-based insect repellents.

The committee seeks a chair and secretary.

RA50, Lightfastness and Weathering
AATCC Staff, Carrie Gray, provided a Blue Wool update on development progress for new nylon fabric as an L7 replacement and subsequent interlaboratory testing. Development of new fabric is ongoing, with interlaboratory study to be performed after development.

The committee received comments on DIS ballot for ISO 105-B04 discussed at the 2023 ISO TC38/SC 2/WG 1 meetings from October 30 to November 3, 2023, in Seoul, Korea. All US comments were accepted as agreed upon by US voters. All comments from the US and other countries were addressed and the document will go to FDIS ballot.

Revision of AATCC TM 125, Test Method for Colorfastness to Perspiration and Light – Will put into style guide format with minor technical changes.

RA56, Stain Resistance


The committee is working on a draft of a new method for Spot Cleaning: Household Soils. The interlab round 2 data from two additional participating labs is to be collected and compiled for statistical analysis for P&B.

RA60, Colorfastness to Washing

Committee members will review the style guide for the following methods:

AATCC TM188, Colorfastness to Sodium Hypochlorite: Bleach in Home Laundering;
AATCC TM172, Colorfastness to Powdered Non-Chlorine Bleach in Home Laundering;
and AATCC TM61, Colorfastness to Laundering: Accelerated.

RA61, Appearance Retention

The committee is still working on completing the draft LP procedure for LED lights for the viewing board.

AATCC TM66, Wrinkle Recovery of Woven Fabrics: Recovery Angle, TM88B, Seam Smoothness in Fabrics after Home Laundering; TM 88C, Crease Retention in Fabrics after Home Laundering; TM124, Smoothness Appearance of Fabrics after Home Laundering; TM128, Wrinkle Recovery of Fabric Appearance and TM143, Appearance of Apparel and Other Textile End Products after Home Laundering needs to be balloted as reaffirmed without changes. Once the LED procedure has been completed then the required changes, with respect to lights, can be made in these test methods and resubmitted for balloting.

The subcommittee reviewed the draft Laboratory Procedure for preparation of appearance evaluation area. The comments in the procedure were addressed and clarified to help update the document.
Request for a New Chair and Secretary was made to the committee.

**RA63, Water Resistance, Absorbency, and Wetting Agent Evaluation**

The committee discussed the recent revision of AATCC TM22, Water Repellency: Spray, which involved replacing the term "tap" with "strike" in reference to the hoop action. Additional revisions were proposed to clarify the purpose of striking. The updated version will be balloted.

The committee agreed to explore potential modifications to AATCC TM42, Water Resistance: Impact Penetration within the AATCC community. Suggestions were made to define the water flow rate that could be utilized for calibrating the nozzle.

**RA75, Evaluation for End-Use Performance**

Committee reviewed AATCC TM22, Water Repellency: Spray and AATCC TM127, Water Resistance: Hydrostatic Pressure. Committee members’ suggestions included creating document to outline best practices on Field /Wear testing; Manufacturer usage of TM42 and TM127 to market isolation gowns – concerned with inaccurate correlation and reviewing committee’s historical data on real-world correlation.

**RA80, Printing Technology**

The group discussed topics for presentation including test methods specific to 4 printing types + embroidery from a printing vendor.

Scheduled speaker cancellation.

**RA87, Applied Dyeing and Characterization of Dyes**

Suggested AATCC TM157, Colorfastness to Solvent Spotting: Perchloroethylene, be forwarded to ballot without the A & B. Once the “perc committee” establishes the P & B round robin protocol, RA87 will join in for the P & B to be added.

Committee discussed upcoming Summit 2024- Savannah, GA; and future dyeing symposium suggestions.

The following test methods are in review:
AATCC TM154, Thermal Fixation Properties of Disperse Dyes; TM159, Transfer of Acid and Premetallized Acid Dyes on Nylon; TM170, Dusting Propensity of Powder Dyes; and TM176, Speckiness of Colorant Dispersions.

RA88, Home Laundering

Discussion on water hardness requirements continue. AATCC to review ISO6330 and ASTMD4265 SNF D116 to see what it says about hardness. AATCC would prefer to reframe from defining hardness testing procedure and criteria as AATCC does not provide pass/fail criteria.

Volunteers needed to draft new method needed for extended/ continuous agitation wash method (killer wash). Durawash may be an option to consider for device to use.

RA89, Hand Evaluation

John Crocker (SDL Atlas) submitted a proposed test method that uses the SDL Fabric Touch Tester instrument to produce haptics related measurements. The committee advised Mr Crocker to revise some of the submission’s language, which he accepted and will resubmit accordingly.

AATCC EP5, Evaluation Procedure for Fabric Hand is being reviewed.

RA99, Technical Manual Editorial Review

The Committee is reviewing several methods for the 5-year review, adherence to AATCC Style Guide, and reaffirmation.

RA100, Global Sustainability

The subcommittee met to discuss using AATCC TM212, Fiber Fragment Release During Home Laundering, to test yarn skeins as predictive models. It would be separate from TM212 and would be extensive to capture the different yarns on the market.

Diana Wyman, AATCC, is working on a draft to outline which type of Circularity methods would apply to AATCC vs. ASTM

AATCC participated in a Joint Circularity conference in Oct 2023

ISO Draft on Circularity will be available in Q2 2024.
RA103, Spectroscopic Technologies

Committee Chair, Nelson Vinueza, hosted the presentation, *Max Weaver Dye Library: A Treasure Trove*, which outlined a history of the Eastman Library of North Carolina State University, Raleigh, NC.

RA104, Garment Wet Processing

Pepa Silla, Jeanologia, hosted the presentation, *Sustainable Technologies for Garment Wet Processing*, which covered Jeanologia’s Color Box technology and how the Garment Wet Processing industry has moved from belly washers to open pocket and 3 compartment front loading garment washers with advancements of implementing lower liquor ratios, such as the ColorBox and eFlow technologies, in an effort to consume less water, less chemicals, and less energy.

RA111, Electronically Integrated Textiles

The committee noted that IPC-8981 should reference existing AATCC Test methods instead of creating new ones when addressing textile performance properties instead of creating new textile related procedures. Jackie Grays, Underwriters Laboratory, agreed to serve as a Liaison between AATCC and IPC 8981.

Committee asked to draft a stretch method. Volunteers needed to start the draft.

The 4pt probe needs to be added to AATCC TM210, Electrical Resistance Before and After Various Exposure Conditions.

RA112, Thermal Analysis

Committee goals include:

- Defining scope of AATCC (dry state testing) vs. ASTM (wet state testing).
- To review thermal testing in a dry state by reviewing ASTM F1868 standard.
- Review technical supplement on Moisture Management related to comfort from the technical manual.
- A joint task group with RA114, Moisture Management & AH401 to review correlations between various evaporative cooling tests.

RA113, Emerging Issues

ISO recently established a Committee for Menstrual Products. Discussion on tampon equivalent vs a quantifiable measurement (ml, etc.). Detailed discussion revolving industry need for synthetic blood for testing and recipe formulation.
Recommendation made to contact Kim Nicholson, AATCC, regarding the Summit 2023 paper submission: Safe and Sustainable Testing of Period Panties.

**RA114, Moisture Management**

WickView instrument is in the AATCC lab. Currently committee chair, Colin Whittaker, PPT Group, is drafting a test method for submission in 2024. It is targeted to tie in with the work being done on RA113, Emerging Issues, regarding menstrual fabrics.

Comfort Properties addressed with new joint sub-committee with RA112, Thermal Analysis.