



### Celebrating a Century of Textiles

In this issue of *AATCC Review*, and continuing throughout 2021, AATCC is celebrating a century of our technical and publishing heritage by reprinting a series of selected articles published in *American Dyestuff Reporter (ADR)*, the first magazine to publish AATCC activities, reports, and presentations (and also in the AATCC publications that followed *ADR: Textile Chemist & Colorist (TC&C)*, and *AATCC Review*, where history is still being made).

All issues of *ADR* are on file in the Technical Center library and in scanned electronic format: [www.aatcc.org/pubs/adr/centennial-celebrations](http://www.aatcc.org/pubs/adr/centennial-celebrations)

Past issues of *TC&C* are available online on the EBSCO Textile Complete database, available from the AATCC website <https://members.aatcc.org/4DCGI/members/index.html>

The history of AATCC may be found in the Association's history book, *Dyeing for a Living, A History of the American Association of Textile Chemists and Colorists: 1921-1996*, by Mark Clark, available for download at: [www.aatcc.org/about/history](http://www.aatcc.org/about/history)

To discuss the articles with members of the task group, click on the "Forum" button at [www.aatcc.org/members/](http://www.aatcc.org/members/), log in, visit the Main AATCC Forum, and join the AATCC Centennial Project topic



## Disperse Dye Development

Introduction by Harold Freeman

Disperse dye development stands out as important in textile wet processing, because this opened the door to the coloration of hydrophobic cellulose acetate fibers, which lacked affinity for the available (hydrophilic) dyes in the marketplace when these fibers were invented in the 1920s. These newly developed dyes were designated “acetate dyes,” in keeping with their target substrate. The subsequent discovery of polyester fibers and the use of “acetate dyes” for their coloration eventually led to the name “disperse dyes” for this family of colorants, which reflected the nature of these dyes in traditional (aqueous) dyeing media.

Over the years, disperse dye development was followed closely through publications in *American Dyestuff Reporter (ADR)* and *Textile Chemist & Colorist (TCC)*. The key publications in this domain pertained to dye design for specific end-use applications (e.g. automotive fibers, heat transfer printing, high temperature dyeing in the presence and absence of water, azo alternatives to anthraquinone dyes), and to technologies for batch and continuous disperse dye application to textiles.

Of special note is the 2002 Olney Medal Award paper written by the premier disperse dye chemist of our age, Max Weaver, at the end of a stellar 44-year R&D career, who received the AATCC Millson Award that same year for innovations in disperse dye development. His paper captured the historical perspectives of disperse dye design and dye structural types, along with challenges in the field and approaches to new dye improvement. This paper reflects the development of over 97,000 disperse dyes, making it invaluable to the training of dye/textile chemists in industry and academia worldwide. It covers all important aspects germane to the development of a substantial body of azo disperse dyes, including the basis for their development, the evolution of structural types as a function of color and properties, and key references that augment the major points of this paper.

Max A. Weaver, “Disperse Dyes: A Dye Chemist’s Perspective”, *AATCC Review*, 3(1), 17-21, 2003.  
Available to members at [www.aatcc.org/pubs/adr/centennial-celebrations](http://www.aatcc.org/pubs/adr/centennial-celebrations)