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The use of new technologies in coloration of textile fibers

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Abstract

Textile coloration is a wet process that uses dyes, chemicals, and large volume of water. The chemical wet processing of textiles continues to expand each year using new technologies. The driving force being the need for cleaner, cost-effective, and value-added textile products. This review will provide a summary of recent developments in the coloration of textile fiber. Emphasis will be paid to the new technologies, in particular those based on physicochemical means such as nanotechnology, electrochemistry, supercritical carbon dioxide coloration, plasma, ultrasonic and microwave, and their uses in the coloration of textile fibers. © 2009 Springer Science+Business Media, LLC.