

# Introduction

Previous books on hair technology have focused on general aspects of hair product formulation. However, there are a variety of differences in the structure, care, and treatment of hair for people with different ethnic and cultural backgrounds. Formulating hair products for African-American, ethnic, or multicultural hair requires a further understanding of the specific hair physiological differences, the ingredients that are most effective and the treatments that are unique to this hair type.

In this book we have pulled together the latest articles from *Cosmetics & Toiletries* magazine that focus on multicultural and ethnic hair. They have been arranged in four sections that reflect the general categories of discussion, including: **Biology, Ingredients, Products** and **Testing**.

**Biology** covers some of the key physiological aspects of ethnic hair biology that are important background information for formulators. The section includes articles about hair growth and the mechanisms by which hair loss occurs, and also covers the latest research in pseudofolliculitis and transfollicular delivery. Finally, the section is completed with a general review of ethnic hair and scalp disorders.

To formulate the best products for a specific hair type, chemists need to know about the latest ingredients and technology available. In the second section on **Ingredients**, the authors review a variety of polymers, silicones, surfactants, esters, waxes, and even some nutritional supplements designed to improve the condition of ethnic hair, reduce breakage and protect hair from further damage. These new technologies should spark some ideas that could lead to the development of improved products for this market segment.

While new ingredients are key to improved products, formulators also must know how to incorporate these technologies into formulas. In **Products**, we've collected a variety of articles that look at the application of new technologies to finished formulas. This section also includes a collection of starting formulations that will be helpful to any product development chemist.

The final section, **Testing**, offers a discussion on testing hair products—notably helpful for developing product claims and synthesizing an accurate and effective methodology.

*Hair Care Formulation for All Hair Types* is designed to be a practical handbook for hair product formulators with a focus on ethnic and multicultural hair types. We hope that you will find it a useful starting point for a fascinating area of cosmetic formulation.

Let's begin...

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