

Preface

Color has been an exciting and enjoyable part of human life ever since the color-sensitive eye evolved over a million years ago. However, the junction between color and chemistry, and color and history, is of more recent origin. The first recorded use of chemistry to manufacture a color is the stunning set of cave paintings found in the Grotte Chauvet in Southern France. Executed over 32,000 years ago (20,000 years earlier than Lascaux!), they are a testimony to early humans' ability to create beauty and to engage in abstract thinking. This volume traces the history of color usage as a chemical endeavor from the earliest records to the present day. It is a trajectory that is more or less direct since the three requisites of history, chemistry, and color function somewhat like a triple point in a phase diagram: they keep us on target! Nonetheless, the history of color chemistry finds stopovers in color physics, atomic theory, ancient dye production, medieval pigment synthesis, organic structural chemistry, and on up to the development of the modern chemical and pharmaceutical industries. It is a journey peppered with outstanding and fascinating personalities, and the difficulties they experienced in delving into the mysteries of color. Color, as we shall see, is not only a delight to the eye, but often a manifestation of the ultimate nature of the colored substance itself. Color pervades every aspect of our lives, our consciousness, our perceptions, our language, our useful appliances and tools, our playthings, our entertainment, our health, our diagnostic apparatus—all based in no small part on chemistry. As such, color is a universal experience and phenomenon. Its chemical history, as you shall see, is no less so.

The Chemical History of Color

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