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Critical paper#2

Beauty does not exist by itself; rather, it exists in the eyes of those who see it. A combination of attributes such as shape, proportion, and color in a human face, or other items that delights the eye is referred to as beauty. Beauty is a quality that is present in nature, and is discovered through scientific effort.



The beauty industry offers a variety of personal products such as skin care, cosmetics, hair care, and perfumes. As well as beauty tools, hair dryers, brushes, combs, and services like salon and spa, etc. As a result, the notion of beauty is intimately linked to important

scientific concepts because each thing in the beauty industry is related to science, medicine and technology in many different ways. Science has a significant impact on the beauty industry. Some even argue that without scientific discoveries and innovation, particularly in chemistry, the beauty industry would not be as large and vital. Because cosmetics make up the majority of the beauty industry, they are impacted by chemistry and would not exist without it. According to the article, *Cosmetic Science-What is it?* The author said, “Since all cosmetics are made up of chemicals (yes even so-called “natural” cosmetics are chemicals), the most important aspect of

cosmetic science is chemistry. This is the study of chemicals and how they interact with each other.” Based on this quote it can be seen that science, especially chemistry, plays an important role in the beauty- cosmetics industry. This quote is significant because it shows the fact that If you don’t understand basic chemistry, you won’t be able to use professional products effectively and safely. Every product used in salons and cosmetology services contains chemicals. Therefore, in chemistry, beauty lives significantly in the visualization of chemical structures.



The visualization of science in the beauty market is based on general optimism about the sciences. Science can be observed in beauty ads and packaging, emphasizing the necessity of a designer's ability to translate complicated technology into a symbolic representation that is visually beautiful, smart, and strategically placed for best customer interaction. As science and technology improve, beauty brand owners and marketers must continue to explain the influence of innovation on beauty goods, marketing, and, eventually, society as a whole. In the article, *The Role of Science in Beauty*, the author states, “while the visual representations of scientific concepts are evident throughout popular art and culture, the process has a practical application as well: It is essential to building the narrative needed to commercialize these innovations. Consumers of beauty products are emotionally invested in a desire for physical transformation, but still require a logical framework in which to place new products claiming wrinkle reduction or teeth whitening.” Consumers of beauty products are emotionally invested in the need for physical transformation, but they still demand a rational justification for the introduction of new products

that are used in cosmetic procedures. Therefore, according to the same article, "*The Role of Science*" it was said that, "It is science that truly delivers the actual transformation and satiates the underlying emotional desire. Thus, it is crucial that a product's target consumer has a basic understanding of the science behind the product's purported beauty benefit. Enter visualization, or a smart and succinct symbol of a scientific concept that allows the consumer to understand how science makes a product work."

The development of products in the field of cosmetics is aimed at creating new makeup, skin care and hair care products. Cosmetic chemists develop compounds and formulas for new products. They work with product development managers to test and refine these formulas, adding color and fragrance elements. Some of the scientific product developments in the beauty industry are products related to skin care products, hair care products, color cosmetics and fragrances. Understanding the science of the skin and how to care for it requires a thorough understanding of chemistry. Some science related beauty products are:

- Skin Caviar Eye Lift Serum,
- High Performance Face Cream,
- Cell Rejuvenating Power Serum,
- Capture Totale C.E.L.L.
- Nutrafol Hair Loss Vitamin



Those products are scientific advances that allowed new product development in the industry. The main ingredients present in those cosmetics include water, emulsifiers,

preservatives, thickeners, moisturizers, dyes and fragrances. Ingredients can be natural or artificial, but the impact on our health depends largely on the chemical compounds they create.

Some of the cutting- edge developments in the beauty industry today are technology related beauty products. The world of beauty is being taken over by technology. For example, from a hair brush that "hears" hair breaking to a mirror that can analyze complexion, it's been compiled a list of some of the most cutting-edge technology breakthroughs in the beauty industry.

In conclusion, cosmetology and chemistry are intimately connected. Almost every aspect of cosmetology, including hair, nails, cosmetics, and skincare, is based on chemistry. The majority of items are made up of chemical combinations or require a chemical interaction to function. To give cosmetics an appealing scent, natural and synthetic chemicals are used. Even unscented goods may include masking perfumes to cover up the odor of other chemicals. Manufacturers frequently use the term fragrance as a general term.

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