

Aspects of Fragrance Chemistry

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Fragrance Chemistry is a fascinating blend of natural products, synthetic, analytical, physical and biochemistry. The marketed end products of this science are scents, which are notoriously difficult to describe, not to speak about to measure and which are individually perceived differently. This adds a new hedonistic dimension to Fragrance Chemistry which makes it even more interesting and also more complex than other branches of industrial chemistry.

Fragrance chemists have the task to prepare molecules with amber, woody, musky, floral etc. odors. The fact that, even single pure compounds do not give rise to a "monochromatic" odor makes structure-activity reasonings or calculations not easy, to say the least.

Not unexpectedly, bearing in mind the receptor event, chirality plays a major role in odor sensation, both what concern odor strength and also odor character.

In order to become successful on the market, the molecules with a characteristic odor, have to fulfill a number of other conditions e. g. biodegradability, a reasonable prize, lack of toxicity and some strange ones like substantivity (tenacity), diffusivity, transparency.

Examples for the statements above, selected from the recent literature, will be given.

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