

Symposium 1-2

## SAFETY EVALUATION OF FRAGRANCE MATERIALS

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### Abstract

Fragrance raw materials are derived from many geographical, natural and chemical sources. Any program of safety evaluation has to consider the materials' origin, types of uses and the concentrations used.

There are many misconceptions about the way fragrances are put together. They are very complex mixtures of essential oils, aroma chemicals, and isolates from plant and animal origins.

An institute, the Research Institute for Fragrance Materials, Inc., an international non-profit organization, has been established by the industry to do research on the many ingredients employed in perfumery.

The chief parameters selected for toxicological screening of all of these materials include tests for allergenicity, phototoxicity, and photoallergy on human skin; tests for general toxicity in animals by the oral and dermal route, and other procedures where required by a Panel of Experts drawn from outside the industry.

There is a new emphasis on light-potentiated skin reactions and the role of fragrance materials in bringing these about.

The ubiquity of fragrances in cosmetics, household goods, insect repellents, etc. makes the responsibility of such an institute a significant one, and it is hoped that in time, this ingredient approach, responded to zealously by the industry, will eliminate potential offenders from fragrances worldwide.

Dermatological diagnostic testing of fragrance materials is complicated by the interactions of items in the mix. It is recommended that this be considered in the testing methodologies used by that profession.