## **Enrollment** form

| Surname and name : |
|--------------------|
| Address :          |
|                    |
| Post and a         |
| – –                |
| Town :             |
| Country :          |
| Tel :              |
| Email :            |

I enclose a deposit of 900 euro made out to "ASFO-GRASSE".

\* Payments will not be reimbursed for cancellations made less than 30 days before the course begins.

Date and signature :

Enrollment fees : 1800 euro (materials, breaks and lunches included)



## The establishment

Modern flavors and fragrances are complex formulated products containing blends of aroma compounds with auxiliary materials, enabling desirable flavors or fragrances to be added to a huge range of products. The analytical chemistry of flavor and fragrance materials presents specific challenges to the analytical chemist, as most of the chemicals involved are highly volatile, present in very small amounts and in complex mixtures.

*Grasse Institute of Perfumery* has partnered with *ERINI laboratory* (European Research Institute on Natural Ingredients) to make you benefit from his training skills widely recognized for 15 years and the expertise of a leading laboratory for R & D and analysis in the field of fragrances and flavors.

The course is designed for people having **a good chemistry background** (Bachelor, Master or a good practical experience). The working language is **English**. The number of participants is limited to 8.

### Information

*Grasse Institute of Perfumery* a division of ASFO-GRASSE Villa Margherite 48, avenue Riou Blanquet - BP 21017 06131 GRASSE Cedex - France tel : 33 4 92 42 34 90 fax : 33 4 92 42 34 95 email : gip@prodarom.fr

# Training course



Practical Analysis of Flavor and Fragrance Materials



www.grasse-perfumery.com

Grasse Institute of Perfumery

We are proud to propose in Grasse, cradle of the modern perfumery, the first international training course about practical analysis of flavor and fragrance materials, led by an eminent expert in the field, Dr. Laure DZIUBA, PhD in Analytical Chemistry and more than 30 year of experience in the fragrance and flavor industry,

For the level 1, the course will be mainly centered on Gaz Chromatography and Mass Spectrometry.

### Program

#### Gaz Chromatography/Mass Spectrometry tutorial

1- For which uses ? Samples' nature and preparation.

- 2- Separation's principles: description of the necessary equipment/needed devices.
- 3- How to perform an analysis? What happens?
  - 3-1- Sampling: autosampler, injector.

3-2- Mobile phase: nature of the gaz, parameters linked to, flow-pressure-velocity management.

3-3- Stationary phase: nature, parameters linked to, temperature management.

3-4- Detection.

3-5- Application : Create and work on a method in order to visualize the separation of constituents in a mixture.

- 4- Mass spectrometer as detector.
  - 4-1- How to build a spectral database.
  - 4-2 How to get identification.

5- Quantification

5-1- The main quantification methods (internal and external calibration, standard addition method) – benefits and limitations

- 5-2- Matrix effects and other parameters that affect quantification
- 5.3- Introduction to method validation

6- Application : Perfume or flavor deformulation.

## G.I.P - Tél. 33 4 92 423 490 - Email : gip@prodarom.fr

### Erini Lab.

Created in 2010, via a partnership of public and private research, ERINI lab. (*European Research Institute on Natural Ingredients*) offers to the fragrance, flavor and cosmetic industry, analytical capacities and innovation on natural products.

## Organisation

The session lasts 1 week, from Monday to Friday from 9 am to 5 pm, lunch included. Training takes place in the premises of ERI-NI Lab. in Grasse.

A map and a list of hotels and furnished accommodation will be send to you with the confirmation of your enrollment.

