

**FRAGRANCE & FLAVOUR DEVELOPMENT CENTRE,**  
(Ministry of MSME, Govt. of India)  
Makrand Nagar, Kannauj-209726(U.P.) Email: [ffdcknj@gmail.com](mailto:ffdcknj@gmail.com)  
Web-site :- [www.ffdcindia.org](http://www.ffdcindia.org)

**Course Content**

**Training on**

**Quality assessment of Essential oils /aroma chemicals using modern instrumental techniques**

1. Duration :- One week (as per schedule on website [www.ffdcindia.org](http://www.ffdcindia.org))
2. Timing :- 10.00 AM to 6.00 PM
3. Venue :- (As per on website [www.ffdcindia.org](http://www.ffdcindia.org))
4. Intake :- 25 Participants
5. Fee :- (As per on website [www.ffdcindia.org](http://www.ffdcindia.org))
6. Eligibility :- 12<sup>th</sup> Pass out

**Objective:** - The course is designed for the participants to understand basics of quality assessment of their essential oils/aroma chemical. Participants also enhance their knowledge to work quality assessment on sophisticated instruments for essential oil, fragrance & flavour raw material.

**Course Content:**

- Introduction to essential oils, fragrance and flavour.
- Determination of oil content in aroma bearing crop/material by Clevenger's method.
- Determination of concrete/absolute in aroma bearing crop/material by soxhlet method.
- Fundamentals of quality assessment of essential oils & aroma chemicals.
  - a) Classical techniques includes-
    - i) *Sensory evaluation* - odour quality analysis  
- colour quality analysis
    - ii) *Physical tests* - specific gravity  
- refractive index  
- optical rotation  
- solubility
    - iii) *Chemical tests* - Determination of acid value.  
- Determination of ester value.  
- Determination of combined alcohols and free alcohols.  
- Determination of ester value content after acetylation.
  - b) Instrumental techniques includes-
    - Gas chromatography (GC) and
    - Thin layer chromatography (TLC)
- Methods/specifications/Standards of essential oils and aroma chemicals.
- Assurance of the quality of test results.
- Accreditation of the laboratory practical demonstration of extraction and distillation of essential oils.
- Practical demonstration of all the above methods will be done.

**How to apply:** - Send your filled registration form along with one passport size photograph & identify certificate via e-mail ([info@ffdcindia.org](mailto:info@ffdcindia.org) / [ffdcknj@gmail.com](mailto:ffdcknj@gmail.com))

**Note:** Fee can also be credited online on following details and copy of the bank receipt may be forwarded by E-mail for getting receipt of your credit.

**Account no. :** 10892289104

**Name of account holder:** - FFDC      **Nature of account:** Current

**Branch Name & Address:** State Bank of India, Saraimeera, Kannauj

**Branch Code:** 00664      **IFSC code of Branch:** SBIN0000664      **MICR Code of Bank:** 209002001

**OR**

Fee can also be transferred online by clicking

<https://www.onlinesbi.sbi/sbicollect/icollecthome.htm>

The Principal Director,  
Fragrance & Flavour Development Centre, Min. of MSME, Govt. of India,  
Makrand Nagar, Kannauj-209 726. Web-site – [www.ffdcindia.org](http://www.ffdcindia.org)