

FILTRATION MEDIA AND FILTERS TESTING CHARACTERIZATION OF PERFORMANCES

PROGRAM :

Filter media and filters for liquid treatments (2hrs)

- ◆ **Classification, description of each products families, operations**
(wovens, clothes, fibrous media, nonwovens, papers, felts, plates, cartridges, aids for precoat, granulars, sands for deep bed, membranes),
- ◆ **Technologies, description of filters and implemented modes**

Principles and mechanisms of filtration, micro, ultra, nanofiltration, reverse osmosis (1hr)

- ◆ **Pressure drop, efficiency, clogging, fouling, rejection rate ...**

Characteristics of filter media (4hrs)

- ◆ **Intrinsic** : structure, particle size, mesh, pore ...
- ◆ **Functional** : hydraulic (permeability, pressure drop, ...), filtering (efficiency, threshold, cut-off, compatibility (resistance to mechanical, chemical stresses ...))
- ◆ **Integrity check.**

This program shows the panorama of :

- ◆ the characteristics of all types of filtration media,
- ◆ the methods, French and international standards, apparatus and test benches for their measurement.

The course alternates : educational **lectures**, content analysis and specifications of **standards** and experimental **measurements**
in the **Laboratory of Measurement** and in the **European Filter Testing Centre** at **IFTS**