

I4PEAN10 (3 ECTS credits)**Metrology environment****Objectives :**

Knowledge and practise of chemical and physico-chemical methods to characterize complex liquid, gaseous and solid media.

Description :

Analysing complex liquid, gaseous and solid samples by means of chemical and physico-chemical methods. Data analysis and synthesis. Integrated approach for characterising chemical and biochemical process. Global characterization of organic matrix (COD, TOC, photometry) ; extraction and assays on chemical compounds in a #solid# matrix (chromatography); gas analysis, liquid/solid medium (suspensions analysis) by image analysis and size distributions.

Assessment method : Oral presentation, Lab work

Number of hours : 0h (lectures), 0h (tutorials), 30h (lab work), 0h (Project), 20h (Personal work)

Prerequisites :

Méthods of analysis - I2BEAN10 Electrochemistry - I2BEAN20 I3BEAN10

Unit of study coordinator :

Semester : 2

Bibliography :

- *Standard methods*, Eaton, Clesceri, Greenberg, , APHA, AWWA, WEF, ISBN 0875532233.
- *L'analyse de l'eau*, Jean Rodier, DUNOD, Paris,1996, ISBN 2100024167