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| N° ECUE | XA4S620 |
| Title | Analytical chemistry for water |
| ECTS |  | Lecture(h)CM 18 |  | Tutorials (h)TD 10,5 |  | Pratical works (h) TP 32 |  | Project (h) |  |
| DescriptionThis course allows the student to master the analytical techniques for analyzing water.The main topics are: electrochemistry, UV-Visible spectroscopy, mass spectrometry and separation by chromatography.Electrochemistry: analytical electrochemistry (intensity-potential curve, electrochemical metering techniques, the main probes Specific probes; Notions of chromatography; UV-Visible Spectroscopy; Mass spectroscopy- Influence of complexation reactions on the strength of an acid. Understanding phenomena using SIMULTIT softwareSpectrophotometry and zero current potentiometry- Comparison of Spectrophotometric and Volumetric Reduction Assay Techniques (COD Simulation)- Spectrophotometry of flame and atomic absorption- gas chromatography- FID- ion chromatography (anions in water)- Complexiometry and ion exchange- Polarography (measurements of metal traces)- HPLC-UV pesticide analysis |
| Key Words | * Monitoring of dissolved elementsElectrochemistryHPLC-UV CPG-FIDspectrophotometryUV-Visible
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| Type of Evaluation | ExamPractical work |