



## Laboratoire de Radio-Analyses et Environnement

18/10/2016

### Training Program

In

#### Laboratory of RadioAnalysis and Environment of the National School of Engineering of Sfax - Tunisia

Training programs proposed by the Laboratory of RadioAnalysis and Environment of the National School of Engineering of Sfax focus on the utilisation of isotope techniques for water resources development and management in arid and semi-arid regions. The training will cover the topics below.

- **Field tasks:** measurements *in situ* parameters (pH, eH, T, conductivity, ...) and sampling techniques for stable isotopes, tritium and C-14.
- **Laboratory tasks:** geochemical analysis (major and trace elements) by High Performance Liquid Chromatography (HPLC) and Ion chromatography, carbon 14 activity analysis by benzene synthesis for liquid scintillation counter and, tritium analysis by electrolytic enrichment for liquid scintillation counter and Oxygen, deuterium and carbon 13 by laser spectrometry
- **Data processing:**
  - Geostatistical database treatment for geochemistry interpretation (Piper diagram, Berkloff, ...),
  - Isotope data interpretation (stable isotope diagram, carbon-14 dating, tritium, etc...) for GW-SW interactions, GW dating, Water rock interaction and some recharge process in unsaturated zone.

In addition to these training, all applicants will have access to documentation, reports and scientific publications made by the laboratory researchers and students.

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Director of the Lab. RadioAnalysis and  
Environment