

## **Occurrence and geochemistry of major ion in groundwater of Skhira coastal aquifer, center east Tunisia.**

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### **Introduction**

The groundwater geochemical process in coastal aquifer should form part of efficient management strategies.

Skhira coastal aquifer is located in the center east of Tunisia. It's already affected by the intrusion saline water phenomena.

The main objectives of this study are the assessment of geochemical process of groundwaters of Skhira aquifer and suitability of groundwater uses.

### **Methodology**

The geochemical study was undertaken using the existing data on the chemical and physical parameters between 2000-2010 from 31 wells.

### **Discussion of Results**

Mechanism controlling the water chemistry indicates that The main geochemical processes influencing the groundwater chemistry in the Skhira aquifer are salinisation, mineral precipitation and dissolution, freshwater recharge, cation exchange and human activity [1].

The salinity measurements increase in the direction of flow and exceeds 10 g/L in the northeast region,.

Groundwater mineralisation is controlled primarily by the concentrations of sodium, chlorides and sulphates.

The majority water samples were undersaturated with respect to halite, gypsum, and anhydrite, suggesting that these mineral phases may have influenced the chemical composition of the groundwater

**Hamzaoui et al.**, (2012): Geochemical characterization of groundwater in Miocene aquifer (South-Eastern Tunisia). *Journal of Environmental and Engineering Geoscience*.