

## **Groundwater Solution Techniques: Environmental Applications**

### **Abstract**

Groundwater models provide a scientific tool for various groundwater studies which include groundwater flow, solute transport, heat transport and deformation. However, without a good understanding of a model, modeling studies are not well designed or the model does not represent the natural system which being modeled long term effects may results. Thus, this review has focused and reviewed the types of solution techniques in terms of advantages and limitations. The findings are vital to improve the model conceptualization and understanding of the uncertainty in model results. On the same hand, it acts as guide and reference to groundwater modeler, reduces the time spent in understanding the solution technique and complexity of groundwater models, as well as focus ways to address the groundwater problems and deliver modeling output more efficiently.