

## **Abstract**

Soil hydraulic parameters are necessary for many studies but, most of the time they cannot be measured because of the practice and financial restraints. A wide range of methods exists currently for measuring soil hydraulic parameters. Using mathematics models to solve problems that involves transport and flow processes it became very important. Soil hydraulic functions can be directly measured, or they can be estimated indirectly more easier using soil data, such as texture and bulk density. This methods have an important role in understanding transport processes happening in soils. Models of this kind can be named pedotransfer functions. This pedotransfer functions have been developed over time. Pedotransfer functions estimates indirectly some soil attributes and they are known from the beginning of modern soil science. By applying this we can conclude some of the soil properties based on some other properties, more easily to find and with lower costs. Rosetta program can estimate many properties as: water retention parameters according to van Genuchten(1980), saturated hydraulic conductivity and unsaturated hydraulic conductivity parameters according to van Genuchten (1980) and Mualem (1976). Rosetta have five pedotransfer functions that allows us to predict hydraulic properties. The hierarchical approach has a great importance because it permits optimal use of available input data. In this context, this paper presents some characteristics of the program. Also the program Rosetta is used to determine hydraulic properties for one type of soil. This properties were used later in a modeling program.

**Key words:** program, hydraulic parameters, pedotransfer functions, mathematical model, van Genuchten, Mualem