

# Electric and Magnetic Field Distribution in a Microwave Oven

Rebeca Maria COLDA, Nicolae CRIȘAN

## **Abstract**

*In this paper, the magnetic and electric field distribution, as well as the way the electromagnetic waves propagate until reaching the load in a microwave oven, will be analyzed. For the microwave oven, two types of cooking chambers will be considered: a rectangular and a cylindrical one, and as loads a potato load and a pizza load. For the simulation of the whole microwave oven model, a very complex simulator developed by the Ansoft Corporation, called High Frequency Structure Simulator (HFSS) was used.*