

## **Abstract**

One of the methods to image a sample is to send the radiation of a particular frequency towards the source. The atoms will resonate and send out the signal which can be used to locate the position of each atom in particular. A gradient field can be used to determine the position of atoms/molecules in the sample. Such a field can be created by a number of coil systems. Here we are going to find the field distribution produced by Helmholtz coils. For our purpose, we will use Finite Element Method as the technique to solve partial differential equations.