Abstract

This study had presented the cavity perturbation theory applied to measurements of the dielectric properties of carbon materials contained in BFD at single frequency of around 2.5 GHz using a cylindrical microwave cavity at TM010 mode. In addition, the study had shown that multimode microwave cavity system at different TM modes can be used to measure the microwave complex permittivity of these materials in the frequency range of 2 to 10 GHz.