

Abstracts

Experimental Development of Simulated Biomaterials for Dosimetry Studies of Hazardous Microwave Radiation (Short Papers)

A.Y. Cheung and D.W. Koopman. "Experimental Development of Simulated Biomaterials for Dosimetry Studies of Hazardous Microwave Radiation (Short Papers)." 1976 Transactions on Microwave Theory and Techniques 24.10 (Oct. 1976 [T-MTT]): 669-673.

Simulated biotissues have been developed which are appropriate for dosimetry studies at X-band frequencies and for S-band modeling experiments which would use miniature phantoms at X-band frequencies. A short-circuited waveguide system has been built and tested for the precise measurement of the dielectric properties of the simulated tissue. Modifications of composition for varying the dielectric properties over a wide range have been found. The specific heats of the materials have been measured and are approximately the same as the tissues they represent.

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