

Abstracts

Measurement of the Microwave Absorption for Small Samples in a Coaxial Line (Short Papers)

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Microwave absorption measurements in terms of power loss per unit volume of very small liquid and solid samples (0.003-2.6 μL) contained in capillaries inserted across the dielectric of a coaxial line have been made between 2 and 26.5 GHz. This perturbation technique makes it possible to measure small differences in the absorption of the samples in a swept fashion. This technique is applicable to biological measurements where the samples are often very small. It is also of use in monitoring and process control environments in biotechnology and polymer technology.

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