

NEAR-FIELD MICROWAVE MICROSCOPE
WITH AN ANNULAR GENERATOR

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S u m m a r y

A new method of investigating insulator parameters in the framework of near-field microwave microscopy, which provides a high resolution of detecting small inhomogeneities $\Delta\varepsilon$ of the dielectric permittivity, has been proposed. The essence of the method is an application of a multimode microwave annular generator, where the frequency shift of generation modes depends on the dielectric permittivity of the investigated specimen. A high accuracy of the frequency shift detection and therefore a high resolution of $\Delta\varepsilon$ are ensured by a digital frequency meter.