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## The Dielectric Constant of Gases at Ultrahigh Frequencies

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THE DESENSITIZATION OF PHOTOGRAPHIC EMULSIONS BY VARIOUS AGENTS AT DIFFERENT WAVELENGTHS OF LIGHT

HOMER MOUDEN

A study of the effectiveness of the organic compounds Pinakryptol yellow, Pinakryptol green, Phenosafranine, and Safranine as desensitizers for photographic emulsions; and the affect of the desensitizers to different wavelengths of light as obtained by exposure through the Wratten filters numbers 78, 58, 47, and 25.

DEPARTMENT OF PHYSICS,  
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THREE DIMENSIONAL COLOR PICTURES  
BY PROJECTION

G. W. Fox

With the production of a cheap polarizing material stereoscopic projection of color pictures is a reality. The technique of projection by both the transmission and reflection methods will be demonstrated.

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THE DIELECTRIC CONSTANT OF GASES AT ULTRA-HIGH FREQUENCIES

ALDEN H. RYAN

The heterodyne beat method has been applied to the measurement of the dielectric constant of gaseous  $\text{NH}_3$ ,  $\text{N}_2$ , and  $\text{CO}_2$ , using a frequency of 56,000,000 cycles per second.

Special precautions were found necessary to prevent frequency drift and synchronization of the oscillating circuits.

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AMES, IOWA.