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# Large Angle Scattering and Energy Loss of Potassium Ions Scattered by Argon, Krypton, Xenon, and Mercury Vapor

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COMPARISON OF SOME COMMERCIALY AVAILABLE  
PHOTOGRAPHIC NEGATIVE MATERIALS

HARRIS HUG

Characteristic curves have been made for several types of negative films manufactured by Eastman Kodak Co. and of corresponding films manufactured by Agfa Ansco Corporation. Although the curves are remarkably similar, there are a few interesting differences.

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A STUDY OF SOME OF THE MODERN NATURAL  
COLOR PHOTOGRAPHIC PROCÈSSES

P. H. CARR

The following additive processes have been investigated: Agfacolor, Dufaycolor, and Finlay. Conclusions are based largely upon experience obtained in the practical use of the processes. The two subtractive processes investigated were Eastman Wash-Off Relief and Defender Chromatone. Here a systematic attempt has been made to analyze the factors which control the results and to eliminate difficulties by some method of control.

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LARGE ANGLE SCATTERING AND ENERGY LOSS OF  
POTASSIUM IONS SCATTERED BY ARGON, KRYPTON,  
XENON, AND MERCURY VAPOR

ARTHUR G. ROUSE

Potassium ions with energies of 90 to 360 volts were scattered by single collisions in the mentioned gases. The energy of the potassium ion after collision has been found to agree with the expected energy assuming conservation of energy and momentum. The angular distribution of the scattered ions is found to vary

with the initial energy of the ion and with the target atom, becoming particularly interesting above the ionization potential.

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## PHOTOMICROGRAPHS OF SNOW CRYSTALS

GEORGE C. HIGGINS

This paper discusses techniques which have been developed for obtaining photomicrographs of snow crystals.

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## A SEMI-AUTOMATIC FILM SLIDE PROJECTOR

H. C. GILBERTSON

Description of a projector designed for use in hallway displays.

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## POSITION OF THE VIBRATOR IN THE EXPERIMENTS OF MELDE AND KUNDT

B. J. MILLER AND L. O. OLSEN

There is evident a fairly general misunderstanding of the location of the vibrator with respect to the nodes and loops in the string or air column in Melde's and Kundt's experiments. It is the purpose of this paper to call attention to the correct view; namely that for small damping, the vibrator is at an approximate node.

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