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Magnetic Properties of Thin Cobalt Films Electrolytically Deposited

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THE FLUORESCENCE OF COD LIVER OIL

C. A. MOREHOUSE

The fluorescence was produced by the radiation from a Cooper Hewitt quartz mercury vapor lamp. A Corex "A" blue purple filter was used to filter out that part of the spectrum of the exciting light in which the fluorescence appeared. The filtered light, which was almost entirely ultraviolet, was focussed directly onto the surface of the cod liver oil by means of a quartz lens.

The fluorescence spectrum was determined by means of a constant deviation glass prism spectrograph. A bright band was obtained for the cod liver oil in the region extending from 546 $m\mu$ to 436 $m\mu$. With a 1% solution of the cod liver oil in alcohol, the same band was found but it was much fainter.

A solution of cholesterol in alcohol also gave a fluorescence band in this same region, i.e., 546 $m\mu$ to 436 $m\mu$. This cholesterol had been previously tested by the Chemistry Department and shown to be capable of being activated by ultraviolet light.

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MAGNETIC PROPERTIES OF THIN COBALT FILMS,
ELECTROLYTICALLY DEPOSITED

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Initial magnetization curves and hysteresis loops of cobalt films from 40 to 100 millimicrons thick show the same general characteristics as iron films of the same range of thickness. The specific properties, however, are largely dependent on the acidity of the electrolyte. The linear relation between thickness and reciprocal of coercive force discovered for iron films is not in general true for cobalt, though it is approximated in some series of films.

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PHYSICAL PROPERTIES OF SOME VEGETABLES

EARL C. McCracken

Extensive investigations are being made by the Household Equipment department of the Home Economics division of Iowa