

I am loth even in appearance to temper these remarks by discussing Mr. Twyman's suggested alternatives, but since he intends temporarily to adopt one of them, I am tempted to do so. Spectroscopic (or spectrographic, which, as Prof. Curtis would probably agree, better describes modern practice) analysis seems preferable to spectrochemical analysis for the following reason. There are three experimental 'hall-marks' of an atom—atomic weight(s), spectrum, chemical properties—and, correspondingly, three methods of analysis, which might be called 'mass-analysis' (by Dr. Aston's instrument, for example), 'spectrographic analysis' and 'chemical analysis'. 'Spectro-chemical analysis' would then indicate an analysis jointly by spectrographic and chemical methods—a not uncommon process, I believe, as in cases where the qualitative analysis is spectrographic, and the quantitative, chemical. It would be a pity to give the name 'spectro-chemical analysis' to a process in which chemical methods are not used.

I repeat my opinion, however, that the proper course to take would be to call spectrum analysis by its own name, and let the penalties of misunderstanding fall on those who are ignorant of physical nomenclature rather than on those who conscientiously learn it.

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¹ NATURE, 136, 609, Oct. 12, 1935.

Antagonistic Effect of Potassium Iodide in Baldness due to Thallium Acetate

THALLIUM salts administered per os or subcutaneously in the body disturb the equilibrium of mineral metabolism¹, bring about lesions in the central and peripheral nervous system², cause disturbances in the endocrine system³, have a deleterious effect upon the heart⁴, bring about disturbances in the digestive tract⁵ and kidneys⁶ and have unfavourable effects upon development and growth of animals⁷. Further, the daily administration of thallium for a longer period of time brings about in animals, especially in young ones, under-development of skin⁸, atrophy of hair follicles, hyperplasy and hypertrophy of sebaceous glands⁹, degenerative changes of hair¹⁰, and alopecia¹¹.

In our experiments we used six groups of rats. The first three groups received daily, per os, 3, 4 and 6 mgm. of thallium acetate per 1,000 gm. weight, respectively. The other three groups received the same quantity of thallium acetate per os, and in addition, each animal received daily, subcutaneously, 0.75 c.c. of a two per cent solution of potassium iodide. After 12–16 days, the rats which received only thallium acetate started losing their hair and at the end of the experiment (35 days) all the surviving animals had lost most of their hair, and some of them, especially those which were getting higher doses, became entirely bald. On the other hand, the rats which received thallium acetate per os and potassium iodide subcutaneously retained completely their hair coating. Also, the mortality in the groups with potassium iodide was smaller, which indicates that potassium iodide reduces the toxicity of thallium acetate.

The object of further experiments being carried out by us is to determine whether other salts of iodine, such as sodium iodide, lithium iodide, calcium iodide and magnesium iodide, prevent partly or entirely the loss of hair caused by thallium and reduce the deleterious action of thallium upon organisms.

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- ¹ Klopstock, *Med. Klin.*, 345; 1924.
² Dixon, *Proc. Roy. Soc. Med.*, 20, 79; 1927.
³ Buschke und Peiser, *Med. Klin.*, 18, 23; 1922.
⁴ Buschke und Jacobsohn, *Diach. med. Wschr.*, 859; 1922.
⁵ Seitz, *Klin. Wschr.*, 1, 157; 1930.
⁶ Schneider, *Ref. Zbl. Hautkrkh.*, 35, 124.
⁷ Buschke und Peiser, *Klin. Wschr.*, 1, 44, 2182; 1922.
⁸ Bernhardt, *Ref. Zbl. Hautkrkh.*, 14, 42.
⁹ Mamoli, *Ref. Zbl. Hautkrkh.*, 18, 39.
¹⁰ Leighab, *Ref. Zbl. Hautkrkh.*, 29, 523.
¹¹ Fiocco, *Ref. Zbl. Hautkrkh.*, 18, 790.

A 'Dope' for Embedding Wax

ATTENTION has been directed by Higgs¹ to the effect of small quantities of petroleum ceresins in causing paraffin wax to cool in a microcrystalline state. It seemed possible that this effect might be valuable in the technique of cutting paraffin sections. During this summer we have been using, for the routine sectioning of early amphibian embryos, a paraffin wax mixture, without addition of bees-wax but containing 0.5 per cent of petroleum ceresin which was supplied by Messrs. Shell-Mex and B. P., Ltd. The results have been all that could be desired, the wax cooling with a very fine texture even when the embedding dish was allowed to cool in the air without being immersed in water. It is necessary to use a mixture having a melting point, before the addition of ceresin, slightly lower than is normally appropriate. The electrostatic properties of the wax appear to be unaltered. The 'dope' may be particularly useful in embedding large objects, in which ordinary wax tends to cool too slowly in the centre of the block.

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¹ Higgs, P. G., *J. Inst. Petroleum Tech.*, 21, 1; 1935. See also NATURE, 135, 113; 1935.

Corophium curvispinum, G. O. Sars, var. *devium*, Wundsch, in England

WHILE passing through Tewkesbury on June 30, 1935 I found thirteen specimens of *Corophium curvispinum* var. *devium*, inhabiting tubes made upon submerged plants in shallow water near the left bank of the River Avon about two hundred yards below King John's Bridge. From the associated flora and fauna I believe this water to be permanently fresh, though I took no measurements of salinity. Prof. Wundsch has kindly confirmed my identification.

The species *C. curvispinum* was described and figured by Sars¹ from the Caspian Sea in 1895. In 1912, Wundsch² described *C. devium* as a new species from fresh water in the Müggelsee, near Berlin. Later