

1939

## The Use of the Spectroscope in Chemistry

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## THE USE OF THE SPECTROSCOPE IN CHEMISTRY

F. H. SPEDDING

A discussion was given of the types of spectroscopes with particular attention to the limitations and applications of certain instruments for absorption and emission spectra studies. The difficulties of manipulation in various regions of the spectra were itemized with a discussion of present technics for such regions.

DEPARTMENT OF CHEMISTRY,  
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## X-RAY DIFFRACTION STUDIES ON NERVE

R. S. BEAR

A summary of the present knowledge of the composition and molecular structure of nerve tissue with particular reference to the application of X-ray technic to the problem.

DEPARTMENT OF CHEMISTRY,  
IOWA STATE COLLEGE,  
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## RING COMPOUNDS FROM CHLOROAMINES AND AMIDES

GEORGE H. COLEMAN

Substituted pyrrolidines have been prepared in good yields by heating N-chlorine derivatives of secondary amines with a mixture of sulfuric acid and water. Amines such as methyl-n-butylamine, ethyl-n-butylamine, methyl-n-amylamine, and di-n-butylamine have been used. The optimal conditions for ring closure are not the same for all amines. Varying amounts of secondary amines are usually recovered. In this reaction an intermediate compound