of Science was directed to advertise for sale copies of the "Life and Works of Doctor Augustin Gattinger" by Henry Nathaniel Oakes, published by the academy. The grant for scientific research allotted to the academy by the American Association for the Advancement of Science was awarded to Nathan H. Woodruff, of Donelson, Tennessee, to continue at Peabody College his research on the "acidity of soils at the roots of ferns in Tennessee." Dr. Charles G. Shoup, assistant professor of biology, Vanderbilt University, was elected a member of the board of trustees of the Reelfoot Lake Biological Station for the term of three years.

Officers elected for the year 1936 are: Claude R. Fountain, *president,* Nashville; Paul J. Kruesi, *vice-president,* Chattanooga; John T. McGill, *secretary-treasurer,* Nashville; Jesse M. Shaver, *editor,* Nashville; Eleanor Eggleston, *librarian,* Nashville.

JOHN T. MCGILL,
Secretary-treasurer

THE OKLAHOMA ACADEMY OF SCIENCE

THE twenty-fourth annual meeting of the Oklahoma Academy of Science was held at the University of Oklahoma, Norman, Okla., on December 6 and 7, 1935. The academy program was divided into four sections which were as follows: Biology, Geology, Physical Sciences and Social Sciences. One hundred and twenty-eight papers were presented. A special section was arranged for high-school science teachers. The total membership in the Oklahoma Academy of Science is 387.

Dr. D. W. Ohern, geologist from Oklahoma City, Okla., gave the annual address to the academy on Friday evening in the university auditorium. The subject of this lecture was "Science in the Thought of To-day." Dr. Ohern was president of the Oklahoma Academy of Science in 1910.

Dr. Charles E. Decker gave the presidential address at the luncheon on Saturday. His subject was "The Oklahoma Academy of Science in Relation to the Advancement of Science and Research in the State."

More than 300 people were present at the meetings. The officers elected for 1936 are as follows:

President, Dr. Horace J. Harper, Oklahoma A. and M. College, Stillwater, Okla.

Vice-president, Section A (Biology), Dr. T. C. Carter, Northwestern State Teachers College, Alva, Okla.

Vice-president, Section B (Geology), Dr. Robert H. Dott, Oklahoma Geological Survey, Norman, Okla.

Vice-president, Section C (Physical Sciences), Dr. A. T. Goble, University of Tulsa, Tulsa, Okla.

Vice-president, Section D (Social Sciences), Dr. L. B. Hoisington, University of Oklahoma, Norman, Okla.

Secretary-treasurer, Dr. Duane Roller, Oklahoma University, Norman, Okla.

Assistant secretary-treasurer, Professor H. I. Featherly, Oklahoma A. and M. College, Stillwater, Okla.

DUANE ROLLER,
Secretary

SPECIAL ARTICLES

SPECTROSCOPIC SIMILARITY BETWEEN ERGOT (LYSERGIC ACID) AND THE YOHIMBINE ALKALOIDS

IN a previous communication,[1] announcing the isolation of ergotocin (the orally effective principle of ergot), the writers reported the alkaline hydrolysis products of ergotocin to be lysergic acid and a base which was at that time the object of further study. In the meantime Jacobs and Craig[2] have identified this basic hydrolysis product as propanolamine; our independent study, not previously reported, has led to the same result.

The degradation reactions commonly employed in establishing the constitutions of natural substances usually give very low yields of identifiable products; hence it seemed desirable, in view of the minute quantities of material available for the investigation of ergotocin to seek other means of attack. Comparison of the ultra-violet absorption spectra of ergotocin and its derivatives with those of other presumably related substances has proved a promising avenue of approach.

Early in this study we were impressed by the marked similarity in the molecular absorption curves for ergotoxine, ergotamine and ergotocin (Fig. 1). Probably these three substances have a common structural skeleton (lysergic acid) chiefly responsible for their respective ultra-violet absorptions.

That ergotocin might be structurally related to the harmala alkaloids is suggested by the similar fluorescence of their solutions; this possibility was, however, rejected after a comparison of the absorption curve of ergotocin with those of harmol, harmine, methyl harmine, harmaline[3] and tetrahydroharmine (Figs. 1 and 2).

[1] M. S. Kharasch and R. R. Legault, SCIENCE, 81: 388, 1935; *Jour. Am. Chem. Soc.,* 57: 1140, 1935.

[2] W. A. Jacobs and L. C. Craig, SCIENCE, 82: 16, 1935.

[3] For purposes of record it seems desirable to report that the same possibility of relationship had occurred to H. A. Shonle and E. C. Kleiderer, of the Eli Lilly Research Laboratories, early in June, 1935. At that time they prepared for publication and submitted to us for comment a note suggesting this relationship. Upon examination of our absorption curves, however, they withheld publication. We still believe that these curves constitute more cogent arguments against the structural relationship of ergotocin