

## THE TENNESSEE JUNIOR ACADEMY OF SCIENCE

FRANCES R. BOTTUM, *Co-Sponsor*

*George Peabody College for Teachers, Nashville, Tennessee*

The Eighth Annual Meeting of the Junior Academy of Science was held on December 3, 1949, in the Science Building at Southwestern College, Memphis. Mr. Robert McGowan, Memphis State College, and Paula Johnson of Central High School, Memphis, presided. Over a hundred students and visitors registered and more attended. Thirteen papers were given by students, all of them accompanied by demonstrations or exhibits. Miss Hutchinson's School, Memphis, sent the largest delegation, closely followed by Treadwell High School, Memphis. Frances R. Bottum, President of the Tennessee Academy of Science, opened the meeting with an address of welcome.

Central High School of Memphis, was most frequently represented on the program. Sponsored by Miss Dorothy Green, Bradley Stanford described the actions and behavior of the praying mantis in captivity. Pat Moore recounted her experiences on an expedition to Machias Seal Island in banding birds for the United States Fish and Wildlife Service. Ronald Haas, sponsored by Mr. J. D. Simpson, discussed the use of electricity in the study of birds, and Harry Estes reported on the Chickasaw Research Foundation and the excavation of mounds of the Middle Mississippi Culture of Mound Builders. Harward Stearns demonstrated mechanical devices which had helped him as a blind student. He gave an exposition of the Braille system and discussed the possibilities and limitations of the use of radar as a device.

Treadwell High School, whose students were sponsored by Mr. J. D. Reding, was represented by Patricia Wintker who demonstrated deterioration of photographic prints from which all hypo is not removed, and by Patricia Reigle who presented an exhibit showing interesting and novel uses of glass. From the Catholic High School for Boys' Eugene Belote brought a model wind tunnel, made by himself, and miniature airplanes with which he showed what constitutes stability in an airplane in flight. Eugene was sponsored by Father J. P. Gresham, as was also Dick Perkins. Dick, using charts and an ingenious device consisting of thirty-two mouse traps and numerous colored corks, discussed atomic energy from "make up of world to atom bomb."

Two boys, sponsored by Miss Nelle Diggs, represented Grove High School, Paris. Donald Riley displayed a mounted cat skeleton and told how it was prepared from an embalmed cat which had undergone dissection beforehand. Billy Mann talked on his hobby, bird study. He had prepared a fine chart. Linden High School, Linden, was represented by Loretta Tucker, sponsored by Miss Pearl Kimball. Loretta had made a study of the life cycle of the cecropia



moth and had prepared a remarkably complete display of specimens. Robert Pace, sponsored by Miss Katherine Matthews, West End High School, Nashville, reported on his study of earthworms, showing charts and specimens.

Emergencies, such as the scheduling of N.R.O.T.C. tests, prevented Robert E. Clark and Daniel Bruce of Catholic High School, Memphis, and Charles G. Hayes and William Dawson of West End High School, Nashville from appearing on the program. These boys had papers, exhibits and demonstrations prepared and had sent in early applications.

Representing the Tennessee Academy of Science, Dr. C. B. Weiss, of the Buckeye Cotton Oil Company, Memphis, discussed "Careers in Science." Dr. Hanor A. Webb announced the Westinghouse Science Talent and the Tennessee Science Talent Search. The film, "This Vital Earth," was shown by Mr. Jerry Shannon, Peabody Demonstration School, Nashville.

The awards from the American Association for the Advancement of Science were made to Dick Perkins, Catholic High School for Boys, Memphis, for his paper "Operation-Atomic Vision," and to Patricia Reigle, Treadwell High School, Memphis, for her study and exhibit entitled "Interesting and Novel Uses of Glass." These two students were awarded also honorary memberships for a year in the Tennessee Academy of Science. Honorable mention was made of the work of Eugene Belote and Bradley Stanford, both of Memphis, and of Donald Riley of Paris. Mrs. Rose Woolridge, Mr. Jesse Fox, and Brother Ignatius Vincent served as judges.

At the noon hour the Junior Academy was entertained at luncheon and later by a variety show under the sponsorship of the Chi Beta Phi Club of Southwestern College. The Junior Academy is indebted to the Chi Beta Phi Club, to Marvin Shinbaum, Denby Brandon, and to Bob Starr, under whose leadership the students at Southwestern did so much to make this meeting a memorable one.

An unusually large number of exhibits had been prepared by college students from Southwestern and Memphis State colleges. These were under the direction of Marvin Shinbaum, Paul Ware, Charles McIntosh, and others. The exhibits included a display of native woods, a step by step layout of simple electric motor construction, a radio demonstration panel, a demonstration of vacuum tube characteristics, a Geiger counter, a stroboscope, the Wilson cloud chamber, and an APS/APN 3 Radar set.

This year's meeting was marked by the high quality in manner of presentation of work by students. The material presented was a credit to the students of Memphis, Linden, Nashville and Paris. Throughout the year the Junior Academy of Science has, as in other years been greatly benefited by its affiliation with Science Clubs of America.