

TENNESSEE JUNIOR ACADEMY OF SCIENCE WINNERS

Each year the Tennessee Junior Academy of Science solicits research papers from high school students across the state. A panel of readers then selects approximately 15 papers for presentation at the annual spring meeting. Selection is made on the bases of research design, creativity, grammar and spelling, and general interest. Abstracts of all papers presented are published in the Tennessee Junior Academy of Science *Handbook and Transactions*, and papers of students rated as the top 5 by a panel of judges are edited and published in their entirety. Following is a list of students invited to the 1980 meeting, with the top 5 being designated by an asterisk:

BELL, CINDY. "Establishment of a Statistical Correlation Between the Incidence of Malignant Neoplasms and the Industrialization of a Rural Tennessee County." Waverly Central High School, Waverly, Tennessee. Sponsoring teacher, Victor Van Cleave.

CROSBY, CAROL. "The Effects of Colchicine on *Drosophila melanogaster*." Camden Central High School, Camden, Tennessee. Sponsoring teacher, Linda Barrett.

FROULA, PAUL. "Plane Hexagonal Geometry: An Experiment in Dimensional and Morphological Restriction." Cleveland High School, Cleveland, Tennessee. Sponsoring teacher, Ashley Smith.

FUQUA, JEAN-MARIE. "The Effects of Commercial Sore Throat and Cold Preparations on Alpha and Beta-Hemolytic Streptococci." Waverly Central High School, Waverly, Tennessee. Sponsoring teacher, Victor Van Cleave.

***HOSKINS, BRYAN.** "Geometric Transformations in Musical Composition." Cleveland High School, Cleveland, Tennessee. Sponsoring teacher, Ashley Smith.

HURST, DANIEL H. "The Effects of Directly Administered Stimuli on Silk Structure and Web Pattern of *Achaearanea tepidariorum(AT)*." Karns High School, Knoxville, Tennessee. Sponsoring teacher, Linda Cain.

KHIM, TAN CHOOI. "Effects of Burning Polyvinyl Chloride in Relation to Air Pollution." Karns High School, Knoxville, Tennessee. Sponsoring teacher, Linda Cain.

***McCLURE, JAMES THOMAS.** "The Development of Oblique Co-ordinate Geometry." Waverly Central High School, Waverly, Tennessee. Sponsoring teacher, Victor Van Cleave.

MALIN, RANDALL. "The effects of Saccharin on the Regenerative Process of Planaria." Camden Central High School, Camden. Sponsoring teacher, Linda Barrett.

MARTIN, BARBARA. "Factors Affecting Lectin-Induced Aggregation of *Actinomyces naeslundii*." Waverly Central High School, Waverly, Tennessee. Sponsoring teacher, Gloria Wallace.

***NADEAU, THOMAS J.** "Design and Construction of a High-Efficiency Amplifier System." Dickson County High School, Dickson, Tennessee. Sponsoring teacher, Ronald P. Robertson.

PETERSEN, DAVID. "A Comparison of Aquatic Life Forms in Pure and Polluted Environments." Karns High School, Knoxville, Tennessee. Sponsoring teacher, Linda Cain.

RARIDON, ANN C. "A Study of the Vertical Distribution of Zooplankton in the MERL Tanks." Oak Ridge High School, Oak Ridge, Tennessee. Sponsoring teacher, Jo Henderson.

***RICHARDSON, KEVIN.** "Frequency Termination Effects of Butterworth and Trapezoidal Filters in the Digital Resolution of Emission-Tomographic Images." Dickson County High School, Dickson, Tennessee. Sponsoring teacher, Ronald P. Robertson.

***ROSS, BRENDA.** "The Effects of Continuous Running on Weight Reduction and Control." Waverly Central High School, Waverly, Tennessee. Sponsoring teacher, Gloria Wallace.

ROSS, GEORGE HEWES III. "The Effect of Droperidol on the Resting Lower Esophageal Sphincter Pressure." Waverly Central High School, Waverly, Tennessee. Sponsoring teacher, Victor Van Cleave.

SEABORN, ARDEN. "Solving Problems with Linear Programming." Cleveland High School, Cleveland, Tennessee. Sponsoring teacher, Ashley Smith.

Request for TAS Nominations for Fellows

The Fellows Committee invites nominations from any member for fellows to be elected at the fall meeting of the Academy. The nominees should:

- 1) be active members of the Academy
- 2) have participated enthusiastically in the activities of the Academy in *more than one of the following ways*:
 - a) Section chairman
 - b) Editor
 - c) Field trip leader
 - d) Committee service
 - e) Publication in J.T.A.S.
 - f) Paper presentations at meeting of the Academy
- 3) be a researcher, educator, administrator or a professional involved in science endeavors in Tennessee

Please submit your nomination with a brief resumé to Dr. Diane Nelson, Secretary, Dept. of Biological Sciences, Box 22900A, E.T.S.U., Johnson City, TN 37601 by August 1. Dr. Nelson will forward the nominations to the Fellows Committee of TAS.
