

GENERAL SCIENCE

Top Scholarship Winners

Alan F. Haught of Bethesda, Md., is awarded the \$2,800 grand prize of the Science Talent Search. Everett C. Dade of Dover, N. H., won the \$2,000 scholarship.

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► A 17-YEAR-OLD Maryland high school senior, who has probed the mysteries of chemical catalysts, has been named grand winner of the Science Talent Search.

Alan F. Haught of Bethesda-Chevy Chase High School in Bethesda, Md., was awarded the \$2,800 Westinghouse Grand Science Scholarship after a five-day competition with 39 other science-minded high school seniors who gathered in Washington from 18 states and the District of Columbia to participate in the Science Talent Institute.

The Science Talent Search, administered by SCIENCE SERVICE through Science Clubs of America, culled the top 40 science students from over 2,000 who completed all the entrance requirements. The 40 winners were brought to Washington to take part in the Science Talent Institute and to compete for scholarships provided by the Westinghouse Educational Foundation.

The young Maryland scientist is pictured on the right on the cover of this week's SCIENCE NEWS LETTER. He took top honors with a project in which, using a home-made spectroscope, he attempted to discover whether some fleeting, unstable chemical compound was formed briefly during a decomposition of hydrogen peroxide in the presence of ferric chloride or cupric chloride.

Alan discovered that some unknown product definitely is formed as hydrogen peroxide disintegrates. Its existence is particularly noticeable when cupric chloride acts as the catalyst. The unknown product revealed its presence to Alan by producing a spectrograph that was different from the normal hydrogen peroxide spectrograph. Spectrographs are to the chemist what fingerprints are to the criminologist.

The tall youth plans to attend Amherst College where he will study science and engineering. He then hopes to enroll at the Massachusetts Institute of Technology for graduate work. Eventually, Alan hopes to help scientists harness the atom to peacetime tasks.

Everett C. Dade, a 16-year-old Dover (N. H.) High School senior, took second place and won a \$2,000 Westinghouse Science Scholarship. His award-winning project, titled "A Theorem on Continuous, Non-Differentiable Functions of a Real Variable," is an attempt to construct a new and unusual class of mathematical functions. He plans to study mathematics at Harvard. His picture appears on the left on the SCIENCE NEWS LETTER cover.

For excerpts from the winners' reports, see p. 173.

Eight others received \$400 scholarships and the other 30 received \$100 scholarships.

Prior to the announcement of the scholarship winners, Lewis L. Strauss, chairman of the U. S. Atomic Energy Commission, told the young scientists that, for the first time since the discovery of fire, man has found in atomic energy a force that can make or break his civilization.

He said President Eisenhower's speech before the United Nations, in which he called for an international pool of atomic products for development to peaceful purposes, stopped world drift and restored moral leadership to the United States.

The AEC chief stated that the independent scientist, such as Edison, is vanishing from the research picture. This is because much fundamental research now is financed by the federal government and, therefore, must be directed toward ends that seem most likely to yield benefits.

Furthermore, advanced research in some fields requires great cash outlays for equipment, something the individual scientist presumably could not afford.

National defense also restricts the areas in which government-sponsored researchers can work, he said. Many new machines

and instruments must be developed to tie in with America's security.

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SCIENCE TALENT INSTITUTE SCENES — *Left side, beginning at top: Drs. I. I. Rabi, Laurence J. Kulp and Bart J. Bok examine shield used in radiocarbon dating, while some of the 40 teen-aged scientists look on; the three judges, Drs. Harold Edgerton, Rex Buxton and Stuart Britt, congratulate the two top girl winners; Dr. L. S. G. Kovasznay shows an "unfuzzed" picture to James E. Seltzer at the National Bureau of Standards (see SNL, March 6, p. 155); and Dr. Samuel G. Hibben of Westinghouse holds an experimental light for Rep. Walter M. Mumma (R-Pa.) and three of the 40.*

Right side, beginning at top: the ten top winners with the three judges, and Dr. L. E. Osborne of Westinghouse, Lewis L. Strauss, chairman of the Atomic Energy Commission, and Watson Davis; Mr. Davis, Dr. Osborne and Mr. Strauss with the two top winners; Dr. Dean Cowie demonstrates the Carnegie Institution's cyclotron; visiting the Naval Ordnance Laboratory; and three former winners, Pierre Conner Jr., Cynthia Wyeth and Alan Goldman, chat with some of the 40.



GENERAL SCIENCE

Winners of Scholarships

GRAND SCHOLARSHIP OF \$2,800

Haught, Alan Frederic, Bethesda, Md.

\$2,000 SCHOLARSHIP AND ALTERNATE FOR \$2,800

Dade, Everett Clarence, Dover, N. H.

ALTERNATE FOR \$2,000

Egger, Maurice David, Bakersfield, Calif.

SCHOLARSHIPS OF \$400

Brumer, Armand, Brooklyn, N. Y.
Egger, Maurice David, Bakersfield, Calif.
Hoff, Marcian Edward, Jr., Churchville, N. Y.
Kreek, Mary Jeanne, Washington, D. C.
Merchant, Carolyn, Rochester, N. Y.
Scanlon, Edward Patrick, Minneapolis, Minn.
Stroebel, Charles Frederick, Rochester, Minn.
Ward, Harold Nathaniel, Evanston, Ill.

ALTERNATES

1st alt. Levy, Richard Jay,
2nd alt. Rodden, Robert James,

SCHOLARSHIPS OF \$100

Baum, Paul Frank, New York, N. Y.
Berry, George Belmont, Jr., South Charleston, W. Va.
Bumby, Richard Thomas, Brooklyn, N. Y.

Burlant, Marguerite, Brooklyn, N. Y.
Carragan, William Dillard, Troy, N. Y.
Cooper, William Samuel, Jr., Greenwood, Miss.
Crothers, Donald Morris, Salem, Ore.
Cyprus, Joel Howard, Wichita Falls, Texas
Davidson, Eric Harris, Nyack, N. Y.
Fiddler, Richard Walter, Kirkland, Wash.
French, Bevan Meredith, Nutley, N. J.
Gansz, Carol Jean, Evanston, Ill.
Hayward, Gary Gillette, Middletown, Ky.
Izzarelli, Anthony William, Fairfield, Conn.
Landisman, Laurel Sydney, Brooklyn, N. Y.
Lee, Susan Huderle, Phoenix, Ariz.
Levy, Richard Jay, Brooklyn, N. Y.
Muffer, Leroy John Patrick, Claremont, Calif.
Oberly, Lorraine Theresa, Allentown, Pa.
Phillips, William, Brooklyn, N. Y.
Rodden, Robert James, New Brunswick, N. J.
Rountree, Janet Caryl, Evanston, Ill.
Sandy, Frank, New York, N. Y.
Scherer, Kirby Vaughn, Jr., Evansville, Ind.
Schmidt, Victor Adolf, Baltimore, Md.
Seltzer, James Edward, Lebanon, Pa.
Simons, David Ralph, Springfield, Ore.
Stillman, Richard Comstock, Forest Hills, N. Y.
Tech, Jack Laurence, Oklahoma City, Okla.
Wolk, Coleman Peter, Westport, Conn.

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