FRANCIS G. SLACK COLLECTION

1928 – 1978

Collection Number: MSS 395

Size. .21 linear feet

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Nashville, Tennessee
FRANCIS G. SLACK COLLECTION

1928 – 1978

Biography/History

Francis Goddard Slack was born in Superior, Wisconsin, on November 1, 1897. He received a B.S. degree from the University of Georgia in 1918 and entered the U.S. Army, being commissioned a pilot; because World War I ended before his graduation he never engaged in combat flying. In 1921 he entered Columbia University and in 1926 received the Ph.D. in physics.

In 1928, Francis Slack came to Vanderbilt University as associate professor of physics. He immediately began to strengthen teaching and research. One of his first constructive efforts was to organize and equip an advanced laboratory where students might learn the rudiments of electrical measurement and perform such famous experiments as the determination of $e$, $e/m$, and $h$. The Vanderbilt laboratory was unequalled in the South at the time.

In 1939, he was appointed Professor of Physics and chairman of the department. He had a distinguished career in the Southeast as a physics teacher, researcher, and administrator. He was the first physicist at Vanderbilt and indeed in the state of Tennessee to put equal emphasis on teaching and on research at a national-international level. In 1951, Professor Slack stepped down from his position. In 1977 Vanderbilt University established in the Department of Physics and Astronomy an annual lecture series named in honor of Francis G. Slack.

Scope and Contents

This .21 linear feet collection contains a biography, a booklet from the first lecture series, and eight pamphlet offprints, authored by Professor Slack, from published journals.

Biography

*Francis G. Slack: Distinguished Vanderbilt Scientist*
By Joseph H. Hamilton, Robert T. Lagemann, and Ernest A. Jones

Lecture Series

*Francis G. Slack Lectures*
Department of Physics and Astronomy, 1977
Pamphlet/Offprints

An Arrangement for Obtaining a Steady Flow of Gas at a Constant Low Pressure
reprinted from The Review of Scientific Instruments – January, 1930

The Effect of Concentration, Temperature and Wave-Length of Light upon the
Verdet Constant of Cerous Chloride Solutions
reprinted from Physical Review – October 15, 1934

Hydrogen Atom in the Stark Effect
reprinted from Physical Review – May 15, 1930

Intensities in the Hydrogen Spectral Series
reprinted from Physical Review – April, 1928

Magneto-Optic Rotation by Condenser Discharge
reprinted from Physical Review – October 15, 1932

Optical Activity and Magneto-optical Activity of Crystalline Nickel Sulphate in
the Near Ultra-violet
reprinted from the Philosophical Magazine – August, 1939

Optical Activity of Crystalline Nickel Sulfate - Hexahydrate
reprinted from Physical Review – September 1, 1938

The Verdet Constant of Heavy Water
reprinted from Physical Review – December 1, 1934