

J. Irvin Swigart papers, 1918-1981

Overview of the Collection

| | |
|----------------------------|--|
| Creator | Swigart, J. Irvin |
| Title | J. Irvin Swigart papers |
| Dates | 1918-1981 (inclusive) 1918 1981 |
| Quantity | 5 linear feet |
| Collection Number | Accn0969 |
| Summary | The J. Irvin Swigart papers (1918-1981) consist of reprints of articles, scrapbooks, photos, notes, and some correspondence from years as professor of physics at the University of Utah, 1931-1978. |
| Repository | University of Utah Libraries, Special Collections. Special Collections, J. Willard Marriott Library University of Utah 295 South 1500 East Salt Lake City, UT 84112-0860 Telephone: 801-581-8863 SPCreference@lists.utah.edu |
| Access Restrictions | Twenty-four hour advanced notice encouraged. Materials must be used on-site. Access to parts of this collection may be restricted under provisions of state or federal law. |
| Languages | English |

Biographical Note

J. Irvin Swigart was a University of Utah physicist, 1931-1978 and a senior physicist in Upper Air Research projects conducted by the University of Utah for the U.S. Air Force during the 1950s and 1960s.

Content Description

The J. Irvin Swigart papers (1918-1981) consist of reprints of articles, scrapbooks, photos, notes, and some correspondence from years as professor of physics at the University of Utah, 1931-1978.

Use of the Collection

Restrictions on Use

It is the responsibility of the researcher to obtain any necessary copyright clearances.

Permission to publish material from the J. Irvin Swigart papers must be obtained from the Special Collections Manuscript Curator.

Preferred Citation

Initial Citation: J. Irvin Swigart papers, Accn 969, Box []. Special Collections and Archives. University of Utah, J. Willard Marriott. Salt Lake City, Utah.

Following Citations: Accn 969.

Administrative Information

Processing Note

Processed by Manuscript Division staff.

Separated Materials

Photographs and slides transferred to the Multimedia Section of the Manuscripts Division (P0599).

Detailed Description of the Collection

Personal Papers, 1928-1930

Box1

| Container(s) | Description | Dates |
|--------------|--|-------|
| Box | | |
| 1 | | |
| Folder | | |
| 1 | Personal, University of Utah | |
| 2 | Physics Lecture Hall Dedication | |
| 3 | Indiana University, Honor Roll | |
| 4 | News clippings | |
| 5 | "The Velocity of Sound in Solid Rods," Doctoral Thesis | |

| Container(s) | Description | Dates |
|---------------|---|-----------|
| 6 | "Comparison of Balance Methods Used in Determining the Surface Tension of Liquids," Master's Thesis | |
| 7 | Distinguished Service Citation | |
| 8 | Correspondence | |
| 9 | Obituary | |
| Volume | | |
| 1-3 | <i>Wesleyana</i> , Yearbook of Illinois Wesleyan University | 1928-1930 |

Articles and Research Material, 1949-1950

Box2

| Container(s) | Description | Dates |
|---------------|---|-------|
| Box | | |
| 2 | | |
| Folder | | |
| 1 | Symposium on Sound | |
| 2 | American Association of Physics Teachers, Programs | |
| 3 | Upper Air Research Laboratory, "Rocket Techniques for Measurement of Atmospheric Density" | |
| 4 | Upper Air Research Laboratory, "Determination of the Particle Density of the Upper Atmosphere by Means of Scattered Light Measurements" | |
| 5 | Upper Air Research Laboratory, "Rocket-Borne Instrumentation to Determine Air Density by Rayleigh-Scattered Light" | |
| 6 | "Rocket-Borne Rayleigh Scattering Instrumentation to Measure Atmospheric Density" | |

| Container(s) | Description | Dates |
|--------------|---|-----------|
| 7 | "Electron Densities of the Ionosphere Utilizing High-Altitude Rockets" | |
| 8 | "The Fundamentals of Transients in Electrical Circuits" | |
| 9 | "Lecture Demonstrations for the High School Science Teacher" | |
| 10 | "A Navigation Training Device For Use in Teaching the Principles of Radio Navigation" | |
| 11 | Radio Navigation, Correspondence | 1949-1950 |
| 12 | "Polarized Waves in Vibrating Strings" | |
| 13 | Lunar Exploration | |
| 14-18 | Research Material | |

Reprints from *Scientific American*, 1949-1962

Box3

| Container(s) | Description | Dates |
|--------------|--|-------|
| Box | | |
| 3 | | |
| Folder | | |
| 1 | <i>Scientific American</i> reprints Includes: Kamen, "Tracers;" Davis, "Low Temperature Physics;" Harlow, "Learning to Think;" and Hurley, "Radioactivity and Time." | 1949 |
| 2 | <i>Scientific American</i> reprints Includes: Seaborg and Perlman, "Synthetic Elements I;" Einstein, "On the Generalized Theory;" Furth, "Limits of Measurement;" and Wald, "Eye and Camera." | 1950 |
| 3 | <i>Scientific American</i> reprints | 1951 |

| Container(s) | Description | Dates |
|--------------|--|-------|
| | Includes: Mayer, "Structure of the Nucleus;" Gray, "Ultracentrifuge;" Ittelson and Kilpatrick, "Experiments in Perception;" and Morrison, "Neutron." | |
| 4 | <i>Scientific American</i> reprints Includes: Deevey, "Radiocarbon Dating;" Darrow, "Quantum Theory;" Wexler, "Volcanoes and World Climate;" McDonald, "Coriolis Effect;" Urey, "Origin of the Earth;" and Wannier, "Nature of Solids." | 1952 |
| 5 | <i>Scientific American</i> reprints Includes: Nier, "Mass Spectrometer;" Dyson, "Field Theory;" Hughes, "Nuclear Reactor as a Research Instrument;" Landsberg, "Origin of the Atmosphere;" Schrödinger, "What is Matter?;" Bethe, "What Holds the Nucleus Together?;" Rossi, "Where Do Cosmic Rays Come From?;" and Piaget, "How Children Form Mathematical Concepts." | 1953 |
| 6 | <i>Scientific American</i> reprints Includes: Wald, "Origin of Life;" Prener and Sullenger, "Phosphors;" and Panofsky, "Linear Accelerator." | 1954 |
| 7 | <i>Scientific American</i> reprints Includes: Terman, "Are Scientists Different?;" Mausner, "Study of the Anti-Scientific Attitude;" Glaser, "Bubble Chamber;" Tuttle, "Origin of Granite;" Cluff and Schetky, "Dislocations in Metals;" Kay, "Origin of Continents;" Heiskanen, "Earth's Gravity;" and Weisskopf and Rosenbaum, "Model of the Nucleus." | 1955 |
| 8 | <i>Scientific American</i> reprints Includes: Morrison, "Neutrino;" Yagoda, "Tracks of Nuclear Particles;" Segrè and Wiegand, "Antiproton;" Hofstadter, "Atomic Nucleus;" Miller, "Information and Memory;" Sietz and Wigner, "Effects of Radiation on Solides;" Fowler, "Origin of the Elements;" Hoyle, "Steady-State Universe;" Gamow, "Evolutionary Universe;" Sandage, "Red-Shift;" De Benedetti, "Mesonic Atoms;" Starr, "General Circulation of the Atmosphere;" and Seaborg and Ghiorso, "Synthetic Elements II." | 1956 |
| 9 | <i>Scientific American</i> reprints Includes: Marshak, "Pions;" Lyons, "Age of the Solar System;" Morrison, "Overthrow of Parity;" Gell-Mann and Rosenbaum, "Elementary Particles;" Ivey, "Electroluminescence;" Bèkèsy, "Ear;" Matthias, "Superconductivity;" and Post, "Fusion Power." | 1957 |

| Container(s) | Description | Dates |
|--------------|--|-------|
| 10 | <p><i>Scientific American</i> reprints</p> <p>Includes: Gamow, "Principle of Uncertainty;" Wilson, "Particle Accelerators;" Michels, "Teaching of Elementary Physics;" Burbidge and Hoyle, "Anti-Matter;" Rosenbaum, "Teaching of Elementary Mathematics;" Lifshitz, "Superfluidity;" Pake, "Magnetic Resonance;" Rock, "Repetition and Learning;" Spitzer, "Stellarator;" Joffe, "Revival of Thermoelectricity;" and Gordon, "Maser."</p> | 1958 |
| 11 | <p><i>Scientific American</i> reprints</p> <p>Includes: Peierls, "Models of the Nucleus;" Greenstein, "Dying Stars;" Witkin, "Perception of the Upright;" Kettlewell, "Darwin's Missing Evidence;" Van Allen, "Radiation Belts Around the Earth;" Treiman, "Weak Interactions;" Wittreich, "Visual Perception and Personality;" Land, "Experiments in Color Vision;" Gamow, "Exclusion Principle;" Wallach, "Perception of Motion;" Jastrow, "Artificial Satellites and the Earth's Atmosphere;" Westerhout, "Radio Galaxy;" Alder and Wainwright, "Molecular Motions;" and Reiner, "Flow of Matter."</p> | 1959 |
| 12 | <p><i>Scientific American</i> reprints</p> <p>Includes: Buchhold, "Applications of Superconductivity;" Marshack, "Nuclear Force;" De Benedetti, "Mössbauer Effect;" Gibson and Walk, "Visual Cliff;" Derjaguin, "Force Between Molecules;" Bernal, "Structure of Liquids;" Soewenstein, "Biological Transducers;" Butterfield, "Scientific Revolution;" Deevey, "Human Population;" Reynolds, "Age of the Elements in the Solar System;" and Reif, "Superfluidity and 'Quasi-Particles.'"</p> | 1960 |
| 13 | <p><i>Scientific American</i> reprints</p> <p>Includes: Benzinger, "Human Thermostat;" Wilson, "New Scale of Stellar Distances;" Gamow, "Gravity;" Fantz, "Origin of Form Perception;" Schawlow, "Optical Masers;" Pritchard, "Stabilized Images on the Retina;" and Penman, "Muon."</p> | 1961 |
| 14 | <p><i>Scientific American</i> reprints</p> <p>Includes: Broadbent, "Attention and the Perception of Speech;" Ericson and Wollin, "Micropaleontology;" Anderson, "Plastic Layer of the Earth's Mantle;" Feder and Spencer, "Telephone Switching;" Hammond, "Effects of Smoking;" Kaufman and Rock, "Moon Illusion;" Morrison, "Neutrino Astronomy;" O'Neill, "Spark Chamber;" Von Frisch, "Dialects in the Language of the Bees;" Dietz, "Sea's Deep Scattering Layers;" Crary, "Antarctic;" Wright, "Antarctic and the Upper Atmosphere;" Rubin, "Antarctic and the Weather;" Murphy, "Oceanic Life of the Antarctic;" Kort, "Antarctic Ocean;" Robin, "Ice of the</p> | 1962 |

| Container(s) | Description | Dates |
|--------------|--|-------|
| | Antarctic;" Woollard, "Land of the Antarctic;" and Llano, "Terrestrial Life of the Antarctic." | |

Course Materials

Box4-7

Course Materials

Box8

| Container(s) | Description |
|--------------|-----------------------------------|
| Box | |
| 8 | |
| Folder | |
| 1-9 | Index Cards with Physics Problems |

Course Materials

Box9

| Container(s) | Description |
|--------------|-----------------------------------|
| Box | |
| 9 | |
| Folder | |
| 1-9 | Index Cards with Physics Problems |

Diplomas, 1918-1930

Box10

| Container(s) | Description | Dates |
|--------------|-------------|-------|
| Box | | |

| Container(s) | Description | Dates |
|--------------|--|-----------|
| 10 | | |
| Folder | | |
| 1 | Diplomas Public School Diploma, Douglas County, Illinois (1918); Sidell Township High School (1922); Chicago Engineering Works (1924); Bachelor of Science, Illinois Wesleyan University (1929); and Master of Arts, Indiana University (1930). | 1918-1930 |

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[University of Utah. Faculty](#)

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