



1956 TRANSISTOR CIRCUITS CONFERENCE

SPONSORED BY

IRE - AIEE - U of Pa.

FEBRUARY 16-17, 1956
UNIVERSITY OF PENNSYLVANIA
PHILADELPHIA, PA.



THURSDAY, FEBRUARY 16

8:00 A.M. — REGISTRATION OPENS
Irvine Auditorium

9:30 A.M.-12:00 Noon — SESSION I — Irvine Auditorium

SPECIAL CIRCUITS

Chairman: P. L. BARGELLINI, University of Pa.

- 1.1 "Audio Automatic Volume Control Circuit," B. D. Griffith and J. Tom (U.S. Army)—Radio Corp. of America, Camden
- 1.2 "Linear Amplifier Employing Non-Linear Amplification," R. F. Grantges and J. Holzer—Signal Corps Engineering Laboratory, Forth Monmouth
- 1.3 "Voltage-Tuned Networks Using Junction Diodes," C. R. Hurtig—Massachusetts Institute of Technology
- 1.4 "Multi-terminal Semiconductors Operated as Two-Terminal Source-Free Switching-Devices," Abraham Har'l, University of Pennsylvania

9:30 A.M.-12 Noon — SESSION A
TUTORIAL — University Museum

- A.1 "Analysis and Equivalent Circuits," R. B. Adler, Massachusetts Institute of Technology
- A.2 "Switching Circuits," R. H. Baker, Lincoln Laboratory, M.I.T.

12:00 Noon-2:00 P.M.—LUNCH
Houston Hall

2:00 P.M.-2:30 P.M. — Irvine Auditorium
Formal Opening of Conference

GEORGE L. HALLER, *Chairman of Conference*
DONALD G. FINK, *Past Chairman of Conference*
J. GRIST BRAINERD, *University of Pennsylvania*

2:30 P.M.-5:30 P.M.—SESSION II — Irvine Auditorium

SWITCHING CIRCUITS

Chairman: H. E. TOMPKINS, Burroughs Corporation, Paoli

- 2.1 "Direct-Coupled Transistor Logic Circuitry in Digital Computers," J. R. Harris—Bell Telephone Laboratories, Murray Hill
- 2.2 "Transistor Requirements for Direct-Coupled Transistor Logic Circuits," J. W. Easley—Bell Telephone Laboratories, Murray Hill
- 2.3 "Junction Transistor Switching Circuits for High Speed Digital Computer Applications," G. J. Prom and R. L. Crosby—Sylvania Electric Products, Inc. Waltham
- 2.4 "Circuit Properties of the Conjugate-Emitter (Hook-Collector) Transistor," J. J. Suran—General Electric Company, Syracuse
- 2.5 "High Speed Transistor Computer Circuits," S. Y. Wong and A. K. Rapp—Philco Corporation, Philadelphia

2:45 P.M.-5:30 P.M.—SESSION B
TUTORIAL — University Museum

- A.3 "Low Frequency Circuits," F. D. Waldhauer, Radio Corp. of America, Camden
- A.4 "High Frequency Circuits," J. B. Angell, Philco Corporation, Philadelphia

6:00 P.M. — COCKTAIL BUFFET
Penn Sherwood Hotel

7:00 P.M. — INFORMAL GROUP DISCUSSIONS
Penn Sherwood Hotel

FRIDAY, FEBRUARY 17

8:30 A.M. — REGISTRATION OPENS

9:00 A.M.-12:00 Noon—SESSION III—
Irvine Auditorium

SMALL SIGNAL AMPLIFIERS

Chairman: R. H. MATTSON, Bell Telephone Laboratories, Murray Hill

- 3.1 "Transistor D-C Amplifiers," J. W. Stanton—G.E. Advanced Electronics Center at Cornell University
- 3.2 "Transistor Amplifier Performance," J. F. Gibbons, Stanford University
- 3.3 "Behavior of Noise Figure in Junction Transistors Over Their Useful Frequency Spectrum," E. G. Nielsen—Bell Telephone Laboratories
- 3.4 "A Carrier-Frequency Transistor Feedback Amplifier," D. A. DeGraaf and F. H. Blecher—Bell Telephone Laboratories, Murray Hill.
- 3.5 "The Design of Bridge-Derived Circuits for Precision Control of Transistorized Amplifiers," W. S. Chaskin, V. Babin and I. Gottlieb—Lenkurt Electric Company, Inc., San Carlos

12:00 Noon-2:00 P.M.—LUNCH Houston Hall

2:00 P.M.-4:30 P.M.—SESSION IV—
Irvine Auditorium

POWER AMPLIFIERS AND POWER SUPPLIES

Chairman: G. H. ROYER, Westinghouse Electric Corp.

- 4.1 "Temperature Effects in Circuits Using Junction Transistors," H. C. Lin and A. A. Barco—R.C.A. Laboratories, Princeton
- 4.2 "Design Considerations for Semi-Conductor Regulated Power Supplies," S. Sherr and P. Levy—General Precision Laboratory, Pleasantville
- 4.3 "The Design of Transistor DC to DC Transformers for a High Degree of Reliability and Stability," U.M. Thompson, Canadian Defence Research Establishment, Ottawa
- 4.4 "Single Power Transistor DC-DC Converter," D.A. Paynter—General Electric Company, Syracuse
- 4.5 "Characteristics and Circuit Applications for a New Type Power Transistor," J. F. Marshall—Minneapolis-Honeywell Regulator Company, Minneapolis

SEE REVERSE SIDE FOR REGISTRATION INFORMATION

1956 TRANSISTOR CIRCUITS CONFERENCE

SPONSORSHIP AND SCOPE

The 1956 Transistor Circuits Conference is sponsored jointly by the IRE Professional Group on Circuit Theory, The Science and Electronics Division of AIEE and the University of Pennsylvania. The Conference is patterned after the previous ones held at the same location for the past several years and will include information on both linear and nonlinear transistor circuit applications. Emphasis will be on material not previously available in the literature and the program is designed to be of greatest value to engineers who already possess some knowledge of transistor circuits behavior. However, there is one day of tutorial papers scheduled for the purpose of orienting those who are newer to this branch of science.

Conference rooms will be available at the Penn Sherwood Hotel after the Cocktail-Bufferet on Thursday in order to afford an opportunity to hold informal discussions of the type that were held last year.

Publication of many of the papers and professional journals is planned in lieu of Conference Transactions.

LOCATION

The Conference will be held on the campus of the University of Pennsylvania in the Irvine Auditorium and in the Museum Auditorium.

Irvine Auditorium is located at the northwest corner of 34th and Spruce Streets; the University Museum Auditorium is just east of the southeast corner of 34th and Spruce Streets, Philadelphia, Pennsylvania. Central Philadelphia is easily reached by streetcar routes 13 and 42; the 30th Street Station of the Pennsylvania Railroad is less than a mile from the University Campus.

ACCOMMODATIONS

The Penn Sherwood Hotel at 38th and Chestnut Streets has reserved a block of rooms for those attending the Conference. Lunches will be served to a limited number on both Thursday and Friday at Houston Hall. For those who prefer to eat elsewhere, Philadelphia offers many fine restaurants.

The Cocktail-Bufferet followed by the roundtable discussions will be held at the Penn Sherwood Hotel on Thursday evening.

REGISTRATION

Registration and hotel reservation forms are being mailed to the members of the sponsoring professional groups in the eastern part of the United States. Others may obtain them from C. W. Hargins, the Franklin Institute Laboratories, 20th and the Benjamin Franklin Parkway, Philadelphia 3, Pa. Fees for the Conference are as follows:

	Advance	At Conference
Registration . . .	3.00	4.00
Thursday Lunch . . .	1.75	2.00
Cocktail-Bufferet . . .	4.50	5.50
Friday Lunch . . .	1.75	2.00
Totals . . .	11.00	13.50

Advance fees above apply only to those registering by mail before February 11, 1956.

Because of limited facilities and to assist the Local Arrangements Committee, advance registration and meal purchases are strongly recommended.

