

# IRE - AIEE

## Conference on

# TRANSISTOR

# CIRCUITS

THURSDAY-FRIDAY  
18-19 FEBRUARY 1954  
MUSEUM OF THE  
UNIVERSITY OF PENNSYLVANIA  
PHILADELPHIA

## SCHEDULE

### WEDNESDAY, FEBRUARY 17

7:00 p.m. - 11:00 p.m.—REGISTRATION  
Penn-Sherwood Hotel

### THURSDAY, FEBRUARY 18

8:00 a.m. - 5:30 p.m.—REGISTRATION  
University of Pennsylvania Museum  
10:00 a.m. - 12:30 p.m.—SESSION I  
Auditorium of the University Museum  
12:30 p.m. - 1:30 p.m.—LUNCH  
Rotunda of the University Museum  
2:30 p.m. - 5:00 p.m.—SESSION II  
Auditorium of the University Museum

### THURSDAY (Cont.)

6:00 p.m. - 7:30 p.m.—COCKTAIL-BUFFET  
Penn-Sherwood Hotel

### FRIDAY, FEBRUARY 19

8:30 a.m. - 2:30 p.m.—REGISTRATION  
University of Pennsylvania Museum  
9:30 a.m. - 12:30 p.m.—SESSION III  
Auditorium of the University Museum  
12:30 p.m. - 1:30 p.m.—LUNCH  
Rotunda of the University Museum  
2:30 p.m. - 5:00 p.m.—SESSION IV  
Auditorium of the University Museum

## TECHNICAL PROGRAM

### SESSION I

PROPERTIES AND REPRESENTATION OF TRANSISTORS  
Chairman: J. J. Suran—*General Electric Company*  
Welcome by Dr. G. P. Harnwell, President of the University of Pennsylvania, who will be introduced by Dr. I. Wolff, Director of Research of RCA Laboratories and Chairman of the National Committee for this conference.

1. "An Engineering View of Transistor Physics"  
J. M. Early—*Bell Telephone Laboratories*
2. "A New Equivalent Circuit for Junction Transistors"  
J. Zawels—*RCA Victor*
3. "Circuit Implications of Surface-Barrier Transistors"  
J. B. Angell—*Philco Corporation*
4. "The Variation of Junction Transistor Parameters with Operating Point and Temperature"  
J. S. Schaffner—*General Electric Company*

### SESSION II

JUNCTION TRANSISTORS IN LINEAR CIRCUITS  
Chairman: J. G. Linvill—*Bell Telephone Laboratories*

5. "Transistor Circuits Utilizing Complementary Symmetry"  
G. C. Sziklai—*RCA Laboratories*
6. "Compensation Techniques in Transistor Circuit Design"  
E. R. Kretzmer—*Bell Telephone Laboratories*
7. "Neutralization of Transistor Bandpass Amplifiers"  
F. P. Keiper—*Philco Corporation*
8. "Feedback in Transistor Circuits"  
S. J. Mason—*Massachusetts Institute of Technology*
9. "Noise in Transistor Circuits"  
P. L. Bargellini—*Moore School of E.E., University of Pennsylvania, and RCA Victor*

### SESSION III

JUNCTION TRANSISTOR AMPLIFIERS  
Chairman: T. R. Finch—*Bell Telephone Laboratories*

10. "Summing and Integrating Amplifiers"  
F. H. Belcher—*Bell Telephone Laboratories*
11. "Transistor Power Amplifiers"  
R. F. Shea—*General Electric Company*
12. "Tetrode I-F Amplifiers"  
L. G. Schimpf—*Bell Telephone Laboratories*
13. "Transistor DC Amplifiers"  
C. R. Hurtig—*Lincoln Laboratory, MIT*
14. "A Carrier-Frequency Feedback Amplifier"  
R. E. Yeager—*Bell Telephone Laboratories*

### SESSION IV

NONLINEAR APPLICATIONS OF JUNCTION TRANSISTORS  
Chairman: A. W. Lo—*RCA Laboratories*

15. "Large-Signal Low-Frequency Behavior of Junction Transistors"  
J. J. Ebers—*Bell Telephone Laboratories*
16. "Transient Behavior of Junction Transistors"  
J. L. Moll—*Bell Telephone Laboratories*
17. "Junction Transistor Switching Characteristics"  
D. E. Deutch—*RCA Victor*
18. "Junction Transistor Switching Circuits"  
J. T. Warnock—*Philco Corporation*

## INFORMATION

### SPONSORSHIP AND SCOPE

The Conference on Transistor Circuits is sponsored jointly by the IRE Professional Group on Circuit Theory and the AIEE Science and Electronics Division. The papers have been selected to appeal to engineers who are already familiar with transistor operation, rather than to engineers who have little previous experience in the field.

All of the papers deal with either junction transistors, or the new surface-barrier transistors. The program reflects the present state of research and development in the transistor circuit field.

Publication of many of the papers in the regular journals of the sponsoring societies is planned.

### LOCATION

The University of Pennsylvania is host to the Conference, and has offered the facilities of the University Museum, which include a fine auditorium for the sessions, the Brazilian Coffee Room for snacks, the Rotunda in which caterers will serve lunch, and extensive archeological and ethnological exhibits for the pleasure and edification of registrants who have heard all that they can digest about transistors!

The University Museum is located on Spruce St. between 32nd and 34th Streets, less than a mile from both the 30th Street Pennsylvania Railroad Station and the 24th Street B. & O. Station. Street cars 13 and 42 from Walnut Street in the center city are convenient for those arriving at Reading Terminal. Parking facilities at the Museum are limited.

The recommended entrance to the museum is from the driveway on 34th Street just south of Spruce Street.

### ACCOMMODATIONS

The Penn-Sherwood Hotel at 39th and Chestnut Streets (formerly the Penn-Sheraton) has reserved a block of rooms for those attending the conference. Those who arrive Wednesday evening may register or confirm their registration for the conference at the hotel to avoid possible delays at the University Museum on Thursday morning.

Lunch will be served in the Rotunda of the University Museum on both Thursday and Friday. For those who prefer to eat elsewhere, Philadelphia offers many fine restaurants.

Cocktails and a buffet supper will be served at the Penn-Sherwood Hotel Thursday evening.

The advance purchase of luncheon and supper tickets is recommended.

### REGISTRATION

Advance registration for the Conference is encouraged since facilities are limited. Registration and hotel reservation forms, which have been mailed to members of the sponsoring professional groups, may be obtained from Mr. L. H. Good, RCA Victor, Bldg. 10-5, Camden, New Jersey.

The advance registration fee for the Conference is \$2.00. The fee for those who register after February 13 is \$3.00.

Tickets for the Cocktail-Bufferet are \$4.50, in advance, or \$5.00 after February 13.

The advance purchase of luncheon tickets before February 13 at \$2.50 per lunch is strongly recommended since the facilities will be limited. A few registrants will be able to purchase lunch for \$2.75 at Conference time.

Registration desks will be set up at the Penn-Sherwood Hotel on Wednesday evening and at the University Museum Auditorium on Thursday and Friday.