



the MONITOR

News of the New York Section, IRE

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TRANSISTORS—Wed., September 16, 7:30 P. M.



Dr. Mueller



Mr. Barton

CHARLES W. MUELLER received a B.S. degree in E.E. from the University of Notre Dame in 1934, the S.M. degree in E.E. from the Massachusetts Institute of Technology in 1936, and the Sc. D. in Physics from MIT in 1942. Since 1942 he has been a member of the technical staff at RCA Labs., Princeton, where he has been engaged in research on high-frequency receiving tubes, secondary electron emission phenomena, and solid-state devices.

LOY E. BARTON received the B.E.E. degree in 1921 and the E.E. degree in 1925 from the University of Arkansas. He joined RCA in Camden in 1929, and has been with RCA in various capacities as a radio engineer and engineering supervisor to date, except for 1936-39. He was transferred to the RCA Labs. at Princeton in 1946.

A NEW P-N-P ALLOY JUNCTION TRANSISTOR FOR RADIO-FREQUENCY AMPLIFICATION by C. W. Mueller and J. I. Pankove, RCA Laboratories, Princeton, N. J. (Paper to be presented by Dr. Mueller. Biographical sketch of Mr. Pankove appears on back page.)

Each parameter which limits high-frequency operation of triode transistors has been reduced by factors of from 3 to 20 as compared with early P-N-P transistors. The result is a junction transistor which oscillates to 40 megacycles and gives high gain and signal-to-noise ratio throughout the medium frequency (0.3 to 3 megacycle) band.

AN EXPERIMENTAL TRANSISTOR PERSONAL BROADCAST RECEIVER by L. E. Barton, RCA Laboratories, Princeton, N. J.

The above transistor has been applied to a small nine-transistor receiver with r.f. sensitivity and noise performance comparable to an all-tube set. It operates from six 1.5-volt dry cells, has twice the audio power output of comparable tube sets, uses a larger speaker, and has a battery life of 500 hours.

PLACE—Engineering Societies Bldg., 33 W. 39th St., Main Auditorium.

PRE-MEETING DINNER—6:00 P. M., Midston Grill, 22 E. 38th St. Everyone welcome—no reservations necessary.

NEXT MEETING—Wed., October 7, "Ferroelectrics and the Dielectric Amplifier" by Dr. Warren P. Mason, Bell Telephone Labs.

MESSAGE FROM OUR CHAIRMAN

The Executive Committee of the New York Section of the Institute, in its continued endeavors to meet more fully the needs of the local membership, has embarked this year upon an ambitious program of improving and extending the various services which it renders. The publication which you are now reading is the mechanism through which we hope to effect one of the purposes of this program, namely, that of providing a more satisfactory line of communication between the Administration of the Section and the membership.

As a result of a better informed membership, it is anticipated that the number of persons actively participating in the affairs of the Section may increase appreciably. While it is recognized that many members have neither the time nor the inclination to serve on Section or Subsection Committees, it is believed, nevertheless, that every member can help to accelerate the realization of the improvements which are contemplated by attending technical meetings and offering personal observations thereof; your suggestions and criticisms are earnestly solicited by the Executive Committee.

It might be well to indicate, in closing, that Section functions provide the membership with the opportunity not only to augment one's technical background but also to expand one's sphere of professional contacts. Our activities this year are being planned so that they may be enhanced in the social as well as the technical aspect, and your officers and committee chairmen look forward to meeting with you personally at our first meeting on September 16.

Very truly yours,

S. S. SHAMIS, *Chairman*
N. Y. Section, IRE

AIEE LECTURE SERIES

The New York Section of the AIEE is offering two lecture series this fall which might be of interest to men in the electronics field. Both of these series have kindly been made available to IRE members, provided that they are members at the time of registration. Leading speakers from industry are being obtained for both series.

One will cover magnetic amplifiers, and is said to be the first complete lecture series ever presented in the metropolitan area covering the theory and industrial application of magnetic amplifiers. There will be 12 sessions, Wednesday evenings, 6:30—8:30, starting October 7, in the auditorium of Ebasco Services, Inc., 2 Rector St. The registration fee is \$15 for IRE members.

The second series is called "Instrumentation and Control," and is concerned with the principles and applications of instrumentation and automatic controls as used in the process and utility industries. There will be 14 sessions, Tuesday evenings, 6:30—8:30, starting October 6, in the General Electric Auditorium at 570 Lexington Ave. Registration fee is \$25 for IRE members.

For further information or registration, contact Mr. S. Friend, Jr., Chairman, Education Committee of N. Y. Section, AIEE, Power and Industrial Division, in care of Anaconda Wire & Cable Co., 25 Broadway, N. Y. 6. Checks should be made payable to Power and Industrial Group, New York Section, AIEE.

NEWS ITEMS WANTED

THE MONITOR is *your* publication, and we want it to include material that will be of interest to *you*. If you have any suggestions, comments, or news items, get in touch with the Editor by mail or phone (Murray Hill 7-8080).

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IRE LECTURE SERIES

Arrangements have been completed for a fall lecture series on the subject of "Pulses and Pulse Techniques." This series will be held on six consecutive Monday nights, 7:00—9:00 P. M., starting October 19. The location will be the Engineering Societies Bldg., Room 502. Complete details regarding speakers, weekly subjects, and registration will appear in the October issue of THE MONITOR.

LONG ISLAND SECTION

What used to be the Long Island Subsection is now the Long Island Section, with full-fledged Section status as of May 5 of this year. Congratulations and best wishes, Long Island!

The first fall meeting of this Section will be on September 15 at the Stewart Ave. School, corner of Clinton Road and Stewart Ave., Garden City. A paper entitled "The Field Effect Transistor" will be presented by George C. Dacey, of Bell Labs.

PROFESSIONAL GROUPS

Professional Group activity in the New York Section is under the chairmanship of Sidney Moskowitz, Federal Telecommunication Labs., Nutley, N. J. Anyone interested in forming a Group Chapter should contact him.

We already have two such Chapters. The first is on Computers, and information on joining this Group may be obtained from Mr. R. Shaw, of the Computer Corp. of America, 149 Church St., N. Y. For information on the other Group, Electron Devices, get in touch with Mr. C. E. Fay, Bell Telephone Labs., Murray Hill, N. J.

SUBSECTIONS

Northern New Jersey

G. P. MCCOUCH, Chairman
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The first fall meeting will be on September 9, 8:00 P. M., at the Bell Telephone Labs. auditorium in Murray Hill. The pre-meeting dinner will be in the Hotel Suburban, Summit, N. J., at 6:15 P. M.—no reservations necessary. General subject of the meeting is "Transistors at Work." The first paper, "Transistor Feedback Amplifier for Carrier Frequencies" is by J. C. Lozier and D. D. Cherry of Bell Labs., and the second, "Automatic Gain Control of Junction Transistors," is by F. H. Blecher, also of Bell Labs.

Monmouth

O. D. PERKINS, Chairman
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The first fall meeting will be September 23 at the regular meeting place, Post Demonstration Theater, Ft. Monmouth. Subject: "Backscatter" by William Whitcraft, Raytheon Mfg. Co.

Mid-Hudson

D. SALING, Chairman
J. HICKERSON, Vice-Chairman
E. A. KELLER, Secretary-Treasurer

The first fall meeting will be September 17 at the Nelson House in Poughkeepsie. Subject: "The Color Synthescope," by Raymond Clurman, Telechrome, Inc.

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JACQUES I. PANKOVE (formerly Pantchechnikoff), who is co-author of the first paper at the September meeting, was born in Russia on November 23, 1922. He grew up in France, where he completed his secondary education. From 1942 to 1944, he attended the University of California in Berkeley, Calif., and received his B.S. degree. The following

two years he served with the U. S. Army. He then returned to the University of California, where he received his M.S. degree in 1948. Since then, he has been engaged in semiconductor research at the RCA Laboratories in Princeton, N. J. Mr. Pankove is an associate member of Sigma Xi and holds a membership in the AIEE.

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