## Contributors to this Issue

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CARL R. ENGLUND, B.S. in Chemical Engineering, University of South Dakota, 1909; University of Chicago, 1910–12; Professor of Physics and Geology, Western Maryland College, 1912–13; Laboratory Assistant, University of Michigan, 1913–14. Western Electric Company, 1914–25; Bell Telephone Laboratories, 1925–. As Radio Research Engineer Mr. Englund is engaged largely in experimental work in radio communication.

RAY S. HOYT, B.S. in Electrical Engineering, University of Wisconsin, 1905; Massachusetts Institute of Technology, 1906; M.S., Princeton, 1910. American Telephone and Telegraph Company, Engineering Department, 1906–07. Western Electric Company, Engineering Department, 1907–11. American Telephone and Telegraph Company, Engineering Department, 1911–19; Department of Develop-

ment and Research, 1919–34. Bell Telephone Laboratories, 1934–. Mr. Hoyt has made contributions to the theory of transmission lines and associated apparatus, theory of crosstalk and other interference, and probability theory with particular regard to its applications in telephone transmission engineering.

Sallie Pero Mead, A.B., Barnard College, 1913; M.A., Columbia University, 1914. American Telephone and Telegraph Company, Engineering Department, 1915–19; Department of Development and Research, 1919–34. Bell Telephone Laboratories, 1934–. Mrs. Mead's work has been of a mathematical character relating to telephone transmission.

WILLIAM W. MUMFORD, B.A., Willamette University, 1930. Bell Telephone Laboratories, 1930—. Mr. Mumford has been engaged in radio receiving work, chiefly on the problem of propagation and measurement in the ultra-short-wave region.

- F. A. Polkinghorn, B.S., University of California, 1922; U.S. Naval Radio Laboratory at Mare Island Navy Yard, California, 1922–24; A-P Radio Laboratories, San Francisco, 1924–25. Pacific Telephone and Telegraph Company, San Francisco, 1925–27; Bell Telephone Laboratories, 1927–. Mr. Polkinghorn's work has been primarily in connection with the design of radio receiving and test equipment for use at high and ultra-high frequencies.
- N. F. Schlaack, B.S., University of Michigan, 1925. Bell Telephone Laboratories, 1925—. Mr. Schlaack has been engaged primarily in the development of short and ultra-short-wave transmitting equipment.
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