

Editorial

DURING THE PAST four years these TRANSACTIONS have grown. We now have more issues, more articles, more letters, and more pages per year. In this growth we have not forsaken quality for quantity—the percentage of manuscripts rejected after review has also increased. Whether the present trend will continue in the future is doubtful. Certainly we cannot expect an indefinite number of original contributions on waveguide filters, parametric amplifiers, and ferrite devices. The theory and techniques in these areas are maturing. Gradually, new subjects and also new authors must take over the pages of future issues. At this time, when Editor and Editorial Board are changed, it is well to look beyond the quantity and quality of our present publication at the basic factors shaping the future of our TRANSACTIONS.

Progress in physics has provided a wide panorama for imaginative microwavers. Quantum electronics, and the principles of masers and lasers are largely beyond the scope of microwave theory and techniques. However, the application of quantum electronic devices is not. Here the term “microwave” deserves the broadest interpretation. Thus, millimeter wave theory and techniques, which differ somewhat from more conventional microwave practice, are universally grouped with microwaves. Coherent waves of shorter wavelength, including visible light, will occupy our attention strongly in the near future. As the techniques for optical wavelengths develop, we shall see that microwaves can be micron as well as millimeter. Although it is too soon to put the “n” in microwaves we should not overlook the possibility—micronwave guides in the form of fiber optics already have many practical uses with incoherent light. Aside from obvious possibilities of shorter

wavelengths, the interaction of microwaves, electromagnetic and acoustic, with solid-state materials offers prospects for totally new techniques in signal transmission and control. Altogether, the outlook for future subject matter in microwave research appears bright indeed.

Authors for our TRANSACTIONS are presumably readers, and hopefully members of the Professional Group. To keep pace with scientific advances, we must have authors, and hence readers, who are in the forefront of research. The best assurance for the future of these TRANSACTIONS therefore lies in a growing circulation to the people and institutions throughout the world where research is carried on.

The time of change in Editors is also an appropriate occasion to acknowledge the people who make the TRANSACTIONS possible. As Editor, I have had the privilege of working with an outstanding Editorial Board. The members have reviewed papers according to high technical standards, and often have improved them significantly by their authoritative criticism. The promise of continued service by many Board members, and the appointment of one of their number, Robert W. Beatty, as the new Editor, assures high competence and continuity in our editorial procedures.

The process of publishing is smoothly handled by E. K. Gannett and his staff at IEEE headquarters. Their exacting work makes the TRANSACTIONS a truly professional journal in format as well as in content.

Finally, I owe thanks to the Administrative Committee of the PTGMTT. The membership and Chairman have changed during my tenure, but support for the Editor has remained constant.

—DONALD D. KING