

# Abstracts

## Microwave and RF education-past, present, and future

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K.C. Gupta, T. Itoh and A.A. Oliner. "Microwave and RF education-past, present, and future." 2002 *Transactions on Microwave Theory and Techniques* 50.3 (Mar. 2002 [T-MTT] (50th Anniversary Issue)): 1006-1014.

This paper is an overview of how microwave and RF education has changed over the years and where it is heading. The history of microwave and RF education, and the key events that influenced its development, are summarized. These events include the need for short-wavelength radar during World War II, the invention of printed transmission lines in the 1950s, the emergence of microwave integrated circuits and solid-state devices during the 1960s, the growing availability of computers and the development of numerical methods during the 1970s, and the availability of microwave circuit simulators and field simulators in the 1980s and 1990s, respectively. The likely impact of recent advances in Internet technology for the distribution of multimedia information is then described. The paper concludes by pointing out the outstanding challenges for the education and continuing education of microwave and RF engineers.

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