# Abstracts

## Experimental Investigation on the Optical Unbalanced Mach-Zehnder Interferometers as Microwave Filters

*A.H. Quoc and S. Tedjini. "Experimental Investigation on the Optical Unbalanced Mach-Zehnder Interferometers as Microwave Filters." 1994 Microwave and Guided Wave Letters 4.6 (Jun. 1994 [MGWL]): 183-185.*

In this work, we study the propagation effects of a modulated lightwave signal in an unbalanced Mach-Zehnder interferometer (UMZI). Experimental results of the microwave frequency response of the structure are obtained using two lightwave network analyzers HP8702A and HP8510B with an optoelectronic HP83420A. It is shown that such an optical device could be used to perform a number of interesting microwave applications. The problems appearing in the coherent working regime and the possibility of integrated device realizations for millimeter-frequency signal processing are also discussed.

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