

# Abstracts

## On the Use of the Coulomb Gauge in Solving Source-Excited Boundary Value Problems of Electromagnetics

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*K.A. Michalski and R.D. Nevels. "On the Use of the Coulomb Gauge in Solving Source-Excited Boundary Value Problems of Electromagnetics." 1988 Transactions on Microwave Theory and Techniques 36.9 (Sep. 1988 [T-MTT]): 1328-1333.*

The advantages and difficulties associated with the use of the Coulomb gauge in solving source-excited boundary value problems of electromagnetic are examined. The correct dyadic Green's function for the Coulomb vector potential in a rectangular waveguide is derived to elucidate the discussion. A flaw in the usage of the Coulomb gauge in Smythe's Static and Dynamic Electricity is uncovered.

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