# F.MIS-SIM 1.0: A Program for Simulation of Metal - Insulating - Si(N) Photovoltaic Structures

## F. Bouzid

**Abstract:** A variety of numerical models are currently in use by scientists investigating different aspects of photovoltaic technologies. The fundamental physics associated with solar cells are often studied using programs that model electron-hole transport and carrier generation-recombination mechanisms. Modeling of individual cells has been done recently using several programs. Our simulation program «F. MIS-SIM 1.0» was designed to simulate the effects of changing physical and geometrical parameters of a MIS solar cell on the photovoltaic performance. We can also simulate the effect of solar spectrum irradiance and temperature on this structure.

**Keywords :** MIS solar cell, Visual Basic, Model, Solar spectrum, I-V characteristics, Spectral response