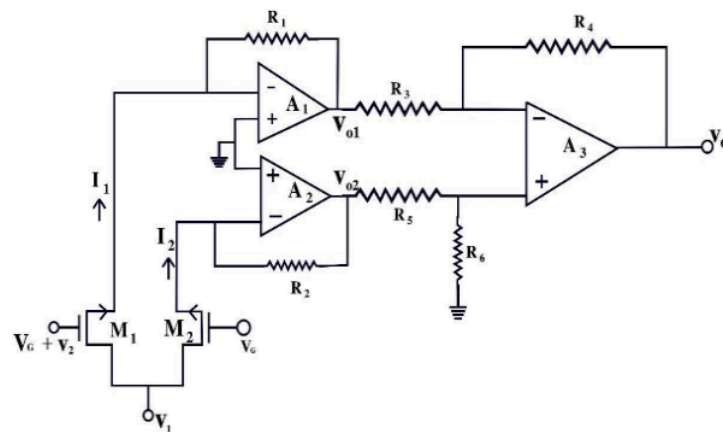**Title -** *FOUR QUADRANT ANALOG MULTIPLIER*
Name - *SUMIT KUMAR DUBEY*
College - *RAJIV GANDHI INSTITUTE OF PETROLEUM TECHNOLOGY*

PROBLEM STATEMENT :

The existing methods for implementing four-quadrant analog multipliers often suffer from issues such as high complexity, large component count, power inefficiency, and inaccuracies due to non-linearities or temperature sensitivity. Traditional designs, relying on diodes or specialized transistors, are often unsuitable for modern applications that require compact, low-power, and high-performance solutions. So we are going to simulate a novel four-quadrant analog multiplier design using operational amplifiers (op-amps) and Metal-Oxide-Semiconductor Field-Effect Transistors (MOSFETs) on ESIM. The proposed method promises a simpler, more efficient, and accurate approach, reducing circuit complexity while enhancing performance for practical applications in signal processing and control systems.

The proposed four-quadrant analog multiplier circuit

JOURNAL/PUBLICATION DETAILS :

- **TITLE OF THE PAPER -** *A New Method of Realization of Four-Quadrant Analog Multiplier using Operational Amplifiers and MOSFETs.*
- **AUTHORS -**   1) Suvajit Roy

     2) Tapas Kumar Pau

     3) Radha Raman Pal

- **REFERENCE -** [A New Method of Realization of Four-Quadrant Analog Multiplier using Operational Amplifiers and MOSFETs](#)