



A typical plot of  $1/C^2$  as a function of the reverse voltage is shown in Fig. 8. The concentration was found to be  $4.1 \pm 0.09 \times 10^7 \text{ cm}^{-3}$  from the slope using the relation:

$$N_d = \left( -2/q\epsilon_{dc}\epsilon_o \right) \left( \frac{\delta V}{\delta \left( \frac{S}{C} \right)^2} \right) \quad (1)$$

where  $S$  is the barrier area and  $\epsilon_{dc}$  is the low frequency permittivity taken as 10.2 after Neville<sup>5</sup>.

Fig. 9: CV measurement of Ga<sub>2</sub>O<sub>3</sub>-Au Schottky Barrier



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Figure 9 shows

the typical CV measurement of

Ga<sub>2</sub>O<sub>3</sub>-Gold Metal Schottky Barrier

with a typical plot of

one over C squared as a function of the reverse voltage.

The concentration was found to be

4.1 times 10 to the 7 th power per cubic cm from the slope.