

TABLE IV.

Temp.	Concentration.	Spec. Conductivity.
25°C	Water	2.745×10^{-6}
"	$4.94 \times 10^{-7}n$ AgNO ₃	2.812×10^{-6}
"	AgNO ₃ sol. along with $4.4 \times 10^{-8}n$ HCl	2.745×10^{-6}
"	8.8×10^{-8} "	2.571×10^{-6}
"	13.3×10^{-8} "	2.612×10^{-6}
"	35.5×10^{-8} "	2.704×10^{-6}
"	66.6×10^{-8} "	2.745×10^{-6}
"	133.3×10^{-8} "	2.842×10^{-6}
"	122.2×10^{-8} "	3.115×10^{-6}

From these values it will be seen that on adding successive drops of a $\frac{N}{10000}$ solution of HCl to a 4.9×10^{-7} normal solution of AgNO₃, the conductivity at first rapidly decreased and after reaching a minimum, steadily increased with the amount of HCl added.

This experiment was repeated, using solutions of AgNO₃, gradually increasing in concentration each time.

The results are given in tables V, VI, VII, VIII, IX, X.

TABLE V.

Temp.	Concentration.	Spec. Conductivity.
25°C	Water	2.596×10^{-6}
"	$9.8 \times 10^{-7}n$ AgNO ₃	2.700×10^{-6}
"	AgNO ₃ sol. along with $4.4 \times 10^{-8}n$ HCl	2.613×10^{-6}
"	8.8×10^{-8} "	2.764×10^{-6}
"	17.7×10^{-8} "	2.822×10^{-6}
"	39.9×10^{-8} "	3.022×10^{-6}
"	84.4×10^{-8} "	3.139×10^{-6}
"	173.3×10^{-8} "	3.375×10^{-6}