Thesis Title	High Voltage Measurement Technique Using Electric Field Motor
Student	Mr.Pongtep Kerdonfag
Student ID.	38621214
Degree	Master of Engineering
Programme	Electrical Engineering
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Thesis Advisor	Assoc. Prof. Siriwat Potivejkul

ABSTRACT

This thesis presents a high voltage measurement technique that can be used for both AC and DC systems based on the principle of electric field motor. The speed of an electric field motor depends on its input voltage. Therefore, the input voltage of the electric field motor can be measured by detecting the speed of the electric field motor. The voltage level range that can be measured depends on the pressure and type of gases in the electric field motor. This can be seen that the electric field motor structure is very important for the results of this technique. Therefore, the Finite Element Program will be used to compute the voltage level and electric field distribution at any point of the electric field motor. The calculated results will be used to design the appropriate structure of the electric field motor that has the linear relation between the speed of motor input voltage and can withstand the measured voltage level. The advantages of this technique are light, compact, portable , easy to install, low cost, without dividers and can be constructed in a laboratory.