

Conclusion

Lab3 experiment is intended to let us design our experiments, to determine the characteristic of a capacitor and verify our results by using different methods including technical libraries. The experiment objectives were achieved by recording the experimental voltage, calculating the theoretical voltage and obtaining the relation between experimental voltage, time in charging and discharging the capacitors. Also, the error between the theoretical and experimental values of voltage had been calculated by using the error's formula. However, we have learned and noticed the difference between the capacitors in charging and discharging time due to the type and amount of the capacitor's dielectric material and the space between its plates. Finally, the most important and beneficial thing was improving our skills in plotting, analyzing the experimental data and results.