

# **DEDICATION**

This thesis is dedicated to my parents for their endless love, support and encouragement. This work is also dedicated to my beloved fiance who has been a constant source of support and encouragement.

# ACKNOWLEDGEMENT

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## **ABSTRACT**

In this work, Inductive coil was used to measure the magnetic permeability of the matters using Alternating Current. Measurement of magnetic permeability for Air, Aluminum, Copper and Iron were done .The obtained results were compared with standard ones, and found to agree to a good degree with them.

## مستخلص

في هذا العمل تم إستخدام الملف الحثي لقياس النفاذية المغناطيسية للمواد بإستخدام تيار متردد. تم قياس النفاذية المغناطيسية للهواء ، الألمونيوم ، النحاس والحديد . تم مقارنة النتائج المتحصل عليها مع النتائج القياسية ووجد أنها متوافقه إلى درجة جيدة معها.