

Kingdom of Saudi Arabia
Ministry of Education
Umm Al-Qura University
Faculty of Applied Science
Physics Department



**Preparation and Characterization of Some Metal Nanoparticles and Study
Their Effects on Dye Doped Polymer as A Gain Medium Laser**

**A Thesis Submitted to Physics Department, Faculty of Applied Science
Umm Al-Qura University**

**In Partial Fulfillment of the Requirements for the Degree of Master of
Physics**

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1440 –2019