



Faculty of Science Chemistry Department

A study on the Removal of Heavy Metal Ions from the Groundwater using some Magnetic Nanocomposite Materials

A Submitted Thesis in Partial Fulfillment for the Requirements of Ph. D. Degree

In Analytical Chemistry

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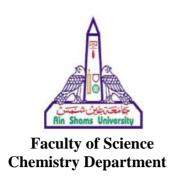
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A Study on the Removal of Heavy Metal Ions from the Groundwater using some Magnetic Nanocomposite Materials

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For the Degree of Ph.D. of Science in Analytical Chemistry

To

Department of Chemistry Faculty of Science Ain Shams University





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First and last thanks to **Allah** who give me the power to go forward in a way illuminated with his merciful guidance. I would like to express my thanks to **Prof. Dr.**Mostafa M. H. Khalil, Professor of Inorganic and Analytical Chemistry, Faculty of Science, Ain Shams University, for giving me the chance to be one of his students and for his generous advices and guidance,. His deep sense of appreciation and dedication to research has been a constant source of inspiration to me. He was always kind enough to follow up the progress of the work with keen interest.

With deep regards and profound respect, I avail this opportunity to express my deep gratitude and thanks to my supervisor **Prof. Dr. Yasser M.**M. Moustafa, Professor of organic Chemistry, Analysis and Evaluation Department, Egyptian Petroleum Research Institute, for giving me the chance to be one of his students, for guiding the plan lines of the thesis, supervising the practical work and revising the manuscript, also for generous advices, valuable discussions, which helped me greatly. His continuous help, encouragement, and guidance helped me all the time of research. He did not only guide this work and find time to discuss with me but also gave me the confidence to express my ideas freely.

I would like to express my thanks to **Dr. Al-Sayed M. A. Bakr** Researcher of physical Chemistry, Analysis and Evaluation Department, Egyptian Petroleum Research Institute, for his suggesting the title and plan lines of the thesis, encouragements, supervising the practical work, for helping and revising the manuscript.

I am so grateful to **Prof. Dr. Mohamed M. M. Yehia** Professor of Chemistry, Central Analytical Laboratory, National Water Research Center, for his supervising in this thesis.

I am thankful to all staff members and colleagues, in Central Analytical Lab, Egyptian Petroleum Research Institute for their support and appreciated help.

I would also like to thank SigmaXL Inc., for providing a complimentary license of Response Surface Methodology software.

I would be nowhere without the support of my family. "Thank You" is an understatement when it comes to what they have done, and still are doing, for me. I'd like to thank my, Dad, Mom, sister and brother for pushing me to always try to be better.

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LIST OF ABBREVIATIONS

Nanosized metal oxides **NMOs** NCs **Nanocomposites HFO** Hydrated ferric oxide MB Methylene blue MO Methyl orange **MFN** Magnetic ferrite nanoparticle world health organization WHO NO Natural Quartz NB Natural Bentonite **PIOMN** pectin-iron oxide magnetic nanocomposite **RSM** Response surface methodology **CCD** Central composite design ANOVA Analysis of variance Transmission electron microscope TEM SEM Scanning electron microscope DLS Dynamic light scattering spectroscopy **VSM** Vibrating sample magnetometer

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