

## **Acknowledgements**

I am pleased with pleasure to extend my sincere thanks, respect and appreciation to the mark and expert water and sanitation engineer Dr. **Mohamed Ahmed Adam Khaddam**, one flags of Environmental Engineering in my dear country, for supervision and Strive with me to write down the research, and his effort and patience throughout the preparation of this research. I would also like to thanks masters:

- **Group of Companies SHIRIAN AL-SHIMAL**
- **Mena -water company**
- **Center engineering and technical studies (CETS).**
- **Dr. Yousif Ali Yousif.**
- **Engineer / Musab Mohamed Haj Ali.**

For their effort and continued support during my research period.

My greater thanks for all who's shared me in preparation, and producing of this research.