

## CHAPTER IV

### CONCLUSIONS

The research consists of three parts. First, sucrose syrup determination was studied by using a simple LOC with naked eyes and with fiber optic spectrophotometer as detection devices. The proposed method can be applied to the determination of sucrose in real samples and was validated by using flow injection analysis and refractometric methods.

Second, Fe (II) determination application to ground water and pond water samples demonstrated using a simple LOC with fiber optic spectrophotometer was investigated.

The last part, phosphate determination using a simple LOC with fiber optic spectrophotometer was studied. It was based on molybdenum blue chemistries; with and without potassium antimonyl tartrate as catalyst. The methods were applied to pond water samples.