

## CONTENTS

1. Introduction	1
2. Experimental	
2.1 Instrumentation	1
2.2 Materials	2
2.3 Measurement Techniques	2
3. Measurements	
3.1 Influence of the Blank Cuvette, Solvent and Water	5
3.2 Influence of Temperature	6
3.3 Influence of Purity	6
3.4 Influence of Concentration	6
3.5 Influence of Spectral Bandwidth	7
4. Results	
4.1 Transmittance of Holmium Oxide Solution	7
4.2 Selection of Useful Wavelengths of Minimum Transmittance	7
4.3 Numerical Data	7
4.4 Uncertainty of Measured Wavelengths	7
4.5 Comparison of Results with Measurements Made on NBS Reference Spectrofluorimeter	7
4.6 Other Measurements Outside NBS	10
5. Conclusions	11
6. References	11