

CONTENTS

1. Sampling systems	1
Sampling system for gases	4
Sampling system for liquids	22
2. Measurement of density or specific gravity	25
Instruments for the measurement of the density of liquids	25
Instruments for measuring the density of gases	35
3. Measurement of humidity	40
Dew – point methods	41
Wet – and dry – bulb hygrometers	42
Hair hygrometers	48
Electrical methods	50
4. Measurement of chemical composition	56
Gas analysis by chemical absorption	56
Spectrochemical analysis	66
Mass spectrometers	100
Electrochemical measurements	107
Analysis of gases by measurement of thermal conductivity	161
Analysis of gases by measurement of heat of reaction	180
Paramagnetic oxygen meters	186
5. The measurement of viscosity	192
Appendix	201
Index	203