

KOROTCENKOV,G. Handbook of Humidity Measurement: Methods, Materials and Technologies,Vol. 1: Spectroscopic Methods of Humidity Measurement. London, United Kingdom: Taylor & Francis Ltd , 2018, 390 p. ISBN 9781138300217.

The first volume of The Handbook of Humidity Measurement focuses on the review of devices based on optical principles of measurement such as optical UV, fluorescence hygrometers, optical and fiber-optic sensors of various types. Numerous methods for monitoring the atmosphere have been developed in recent years, based on measuring the absorption of electromagnetic field in different spectral ranges. These methods, covering the optical (FTIR and Lidar techniques), as well as a microwave and THz ranges are discussed in detail in this volume. The role of humidity-sensitive materials in optical and fiber-optic sensors is also detailed. This volume describes the reasons for controlling the humidity, features of water and water vapors, and units used for humidity measurement.