

特集：皮膚の物性の測定

## 皮膚からの水分蒸発量測定

原 裕英\*

### On the Measurement of Evaporative Water Loss Through Skin

Yasuhide Hara\*

#### Abstract

A new method, based on the estimation of the vapour-pressure gradient immediately adjacent to the surface of the skin, permits the surface investigated to be exposed to normal ambient air during the entire period of measurement. On the basis of the new method an instrument for measuring small amounts of water evaporated from or absorbed by a surface per unit time and area is described and its accuracy discussed. This instrument has proved to offer a high accuracy and an improved sensitivity in comparison with devices previously employed. It has been used primarily for investigations of the rate of evaporation from the skin surface of newborn infants as well as of thyrotoxic and burned patients. The construction of the instrument, however, makes it well suited for the measurement of evaporation rates in many other fields of application.