

〈シンポジウム〉

機能を持つ化粧品の有用性を支える技術

Vivo で有効性を測定する

高橋元次*

***In vivo* Skin Measurement for Cosmetic Efficacy Test**

Motoji TAKAHASHI*

Abstract

Many bioengineering techniques to measure skin properties have been used in cosmetic efficacy test. They are measurement of water content of stratum corneum, skin surface contour, TEWL, skin color, blood flow, sebum secretion rate and so on. In addition to above methods, recently, a few bio-microscopes which can examine the inside of the skin *in vivo* have been developed and applied to substantiation of usefulness of cosmetics. Among them I describe the *in vivo* confocal microscopy, optical coherence tomography (OCT) and *in vivo* confocal Raman spectroscopy in this paper. *In vivo* wrinkle measurement without skin surface replica is also mentioned.

Key words: *in vivo* confocal microscopy, optical coherence tomography, *in vivo* confocal Raman spectroscopy, *in vivo* wrinkle measurement skin, efficacy test