

〈シンポジウム II〉

『感覚から香粧品の価値を考える』

デジタル映像における色彩情報の計測と再現

村上百合

**Measurement and Reproduction of Color Information in Digital Images**

Yuri MURAKAMI

**Abstract**

Color reproduction of digital images is strongly required, but difficult to be realized by conventional color imaging systems. To realize high fidelity color reproduction, spectrum-based color reproduction scheme has been proposed, in which the spectral information of target scenes are captured by a multispectral camera, and color information is recovered by signal processing based on the information of illumination and camera devices used for recording. This paper reviews the spectrum-based color reproduction from a basic colorimetry. In addition, spectral imaging is effectively utilized in other applications, such as visualization of invisible information or target recognition based of spectral information. Some results with skin spectral images are introduced in this paper. Finally, the importance and difficulty of shitsukan reproduction, the next step of color reproduction, is described for more realistic image reproduction.

**Key words:** color reproduction, multispectral imaging, spectral analysis, skin image, shitsukan.