

平成 26 年度「日本薬局方の試験法等に関する研究」研究報告^{*3}

医薬品の定性分析へのテラヘルツ／遠赤外分光法の

導入・標準化に関する研究

坂本 知昭^{*1, #}, 伊藤 雅隆^{*2}, 菊地 恵理^{*2}, 寺田 勝英^{*2}, 香取 典子^{*1}, 合田 幸広^{*1}

Study on Standardization of Terahertz/Far-Infrared Spectroscopy
for Pharmaceutical Qualitative Analysis

Tomoaki SAKAMOTO^{*1, #}, Masataka ITO^{*2}, Eri KIKUCHI^{*2}, Katsuhide TERADA^{*2},
Noriko KATORI^{*1} and Yukihiro GODA^{*1}

Summary

We evaluated the applicability of terahertz time-domain spectroscopy (THz-TDS) and terahertz continuous wave spectroscopy (THz-CW Spectroscopy) for qualitative analysis of drugs from The Japanese Pharmacopoeia. Tablets were mainly used in this study. Sample dilution ratio, water vapor and fragment size of crushed tablets were examined as variable factors. We were able to obtain good transmittance spectra by burying 75-150 μm fragments of crushed tablet in a polyethylene disc.

Key words

Terahertz spectroscopy, Far-infrared spectroscopy, Qualitative analysis