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The authentication of halal dental materials using rapid fourier transform infrared (FTIR) spectroscopy (Article)

Aziz, A.H.A.^a, Mutalib, N.A.A.^b, Rahman, R.A.^c, Jaswir, I.^b, Mirghani, M.E.S.^b, Octavianti, F.^a, Rahmadsyah, A.^a 

^aIslamic Sciences University of Malaysia, Malaysia

^bInternational Islamic University Malaysia, Malaysia

^cUniversiti Putra Malaysia, Malaysia

Abstract

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The purpose of this study is to detect the presence of gelatin in orthodontic dental materials for halal authentication. The detection of gelatins was done using Fourier Transform Infrared Spectroscopy with Attenuated Total Reflectance (FTIR-ATR). In this study, 21 samples were included and the spectrums were generated by OMNIC software of Nicolet iS50 FTIR. All data were also subjected to similarity match (SM) using TQ Analyst software. Four types of gelatin tested, namely porcine, bovine, fish and commercialized gelatin. From the studies, it was found that no samples exhibit similar spectra as the gelatins tested and SM found that no samples showed 100% similarities with porcine gelatin. © 2017 American Scientific Publishers All rights reserved.

Author keywords

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
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