

Raman spectroscopy as a powerful technique for the identification of polymers used in cast sculptures from museum collections.

Autorzy

Anna Klisińska-Kopacz
Barbara Łydzba-Kopczyńska
Monika Czarnecka
Tomasz Koźlecki
Julio M. del Hoyo-Mélendez
Agata Mendys
Anna Kłosowska-Klechowska
Michał Obarzanowski
Piotr Frączek

Rok wydania

2019

Czasopismo

Journal of Raman
Spectroscopy

Numer woluminu

50

Strony

213-221

DOI

10.1002/jrs.5407

Kolekcja

Naukowa

Język

Angielski

Streszczenie

The chemical identification of materials is the first step for developing and implementing recommendations for the care and display of resin cast and plastic objects in museum collections. This paper presents advantages as well as limitations of portable Raman. Therefore, a comparative analysis of portable and benchtop Raman instruments was performed in the study of materials found in the contemporary art collections of the National Museum in Krakow. The results of the Raman study were complemented with those obtained using Fourier transform infrared, near infra-red, and gas chromatography mass spectrometry, in order to verify their accuracy. The results of this study showed that portable Raman spectroscopy is a suitable technique for the identification of plastics in museum collections.

Słowa kluczowe

plastics in museum, polymer identification, portable Raman, PVC

Adres publiczny

<http://dx.doi.org/10.1002/jrs.5407>

Strona internetowa wydawcy

onlinelibrary.wiley.com

Artykuł

Plik został wygenerowany dnia 2026-08-24 05:39:45

Adres w repozytorium <https://old.chem.uni.wroc.pl/pl/repozytorium/sk50OIA>.