



Showcasing research from BSc Calero-Cañuelo, Professor Lucena, and Professor Cárdenas, from the Affordable and Sustainable Sample Preparation group, University of Cordoba, Spain.

Integrating in-vial thin film microextraction using polysiloxane-based adhesive tapes with low-temperature plasma ionization mass spectrometry: A solvent-free approach for determining cocaine and methamphetamine in saliva samples

This article describes a novel in-vial microextraction technique that utilizes thermal-resistant adhesive tapes as both the sorptive phase and the thermal desorption substrate. The microextraction technique is directly coupled to mass spectrometry using a low-temperature plasma ionization source. The method allows the determination of cocaine and methamphetamine in saliva at low ppb levels. The analytes remained stable on the tape, opening the door to on-site extraction workflows.

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See Rafael Lucena *et al.*,
Green Chem., 2025, **27**, 12201.