

Determination of PAHs and selected methyl-PAHs in environmental Standard Reference Materials using fluorinated PAHs as internal standards

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Concentrations of PAHs and selected methyl-PAHs have been determined by gas chromatography/mass spectrometry (GC/MS) in environmental Standard Reference Materials (SRMs), including SRM 1649a (Urban Dust), SRM 1650b (Diesel Particulate Matter), and SRM 1944 (New York/New Jersey Waterway Sediment), using fluorinated PAHs as internal standards. Separations were facilitated by the use two selectively different capillary gas chromatography columns. The characterization of the PAH content of these SRMs determined using fluorinated PAHs as internal standards will be presented and compared to those determined using other compounds as internal standards, such as perdeuterated PAHs. The PAH concentrations determined using fluorinated PAHs as internal standards will also be compared to values reported on the Certificate of Analysis for each material. In addition to the SRMs reported here, selected biological SRMs, such as SRMs 1974b, Organics in Mussel Tissue (*Mytilus edulis*) and 2977, Mussel Tissue (Organic Contaminants and Trace Elements), are to be examined for PAHs using fluorinated PAHs as internal standards. The determination of polybrominateddiphenyl ethers in selected environmental SRMs using fluorinated analogs as internal standards is also planned.