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Authors: Jana Rousová, Manikyala R. Chintapalli, Anastasia Lindahl, Jana Casey, Alena Kubátová

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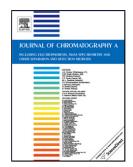
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ACCEPTED MANUSCRIPT

Simultaneous Determination of Trace Concentrations of Aldehydes and Carboxylic Acids in Particulate Matter

Jana Rousová^{1,a}, Manikyala R. Chintapalli^{1,b}, Anastasia Lindahl^{1,c}, Jana Casey^{1,d}, Alena Kubátová^{1*}

¹Department of Chemistry, University of North Dakota, 151 Cornell Street, Grand Forks, ND 58202, USA

Present address

^aRestek, 110 Benner Circle, Bellefonte, PA 16823

^bSpectrum Health, 25 Ottawa Ave SW, Grand Rapids MI 49503

^cDepartment of Biomolecular Chemistry, University of Wisconsin-Madison, 330 N Orchard Street, Madison WI 53715

^dBristol-Myers Squibb, 1 Squibb Dr, New Brunswick, NJ 08903

*Corresponding author Email: alena.kubatova@UND.edu;

phone: 701-777-0348; fax: 701-777-2331

Highlights

- Simultaneous derivatization and GC-MS analysis of aldehydes and carboxylic acids
- One-step derivatization with PFBHA/MeOH for all aldehydes and the majority of acids
- Aromatic and hydroxyacids required sequential trimethylsilylation with BSTFA to PFBHA/MeOH derivatization
- Confirmed on a broad range of species with various functionalities (~95 compounds)
- Evaluated on representative wood smoke and urban air particulate matter

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