Supporting Information

Aldehyde detection in electronic cigarette aerosols

Mumiye A. Ogunwale[†]; Mingxiao Li[‡]; Mandapati V. Ramakrishnam Raju[†];
Michael H. Nantz[†]; Daniel J. Conklin[§]; Xiao-An Fu[‡*]

[†]Department of Chemistry, [‡]Department of Chemical Engineering, [§]Diabetes and Obesity Center,
and American Heart Association – Tobacco Regulation and Addiction Center,
University of Louisville, Louisville, KY 40292

*Corresponding author: Xiaoan.fu@louisville.edu

Figure S1. The effect of puff volume on the amount of acetaldehyde, formaldehyde and acrolein generated in vapors of Blu e-cigarette with a Magnificent Menthol cartridge with 16 mg of nicotine at a fixed puff duration of 2s and puff frequency 1/30s for 10 puffs. P values for the amounts aldehydes with the puff volume from 20 mL/puff to 60 mL/puff.

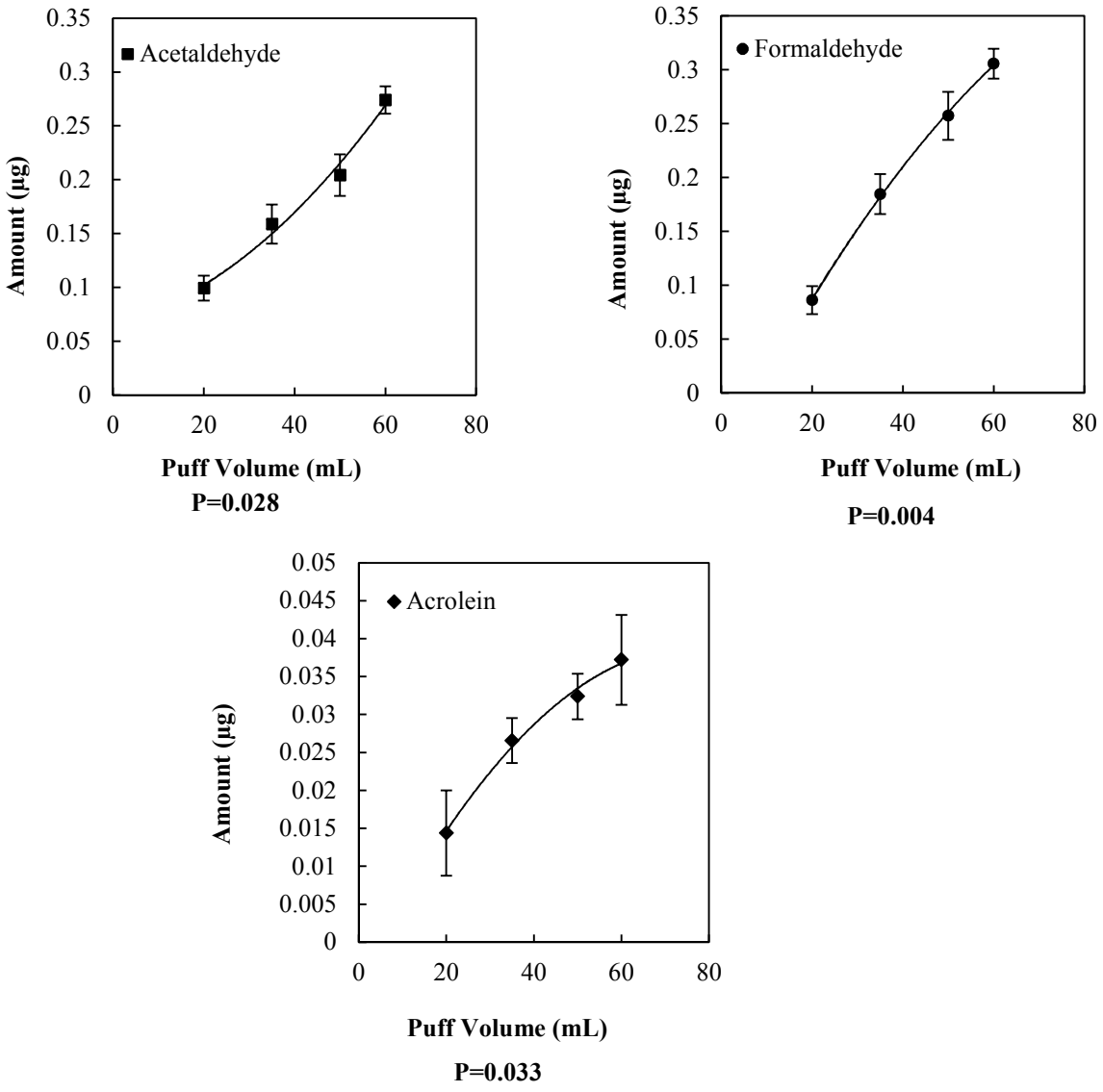

Figure S2. The effect of puff volume on the amount of acetaldehyde, formaldehyde and acrolein generated in vapors of Blu e-cigarette with a Classic Tobacco cartridge with 16 mg of nicotine at a fixed puff duration of 2s and puff frequency 1/30s for 10 puffs. P values for the amounts aldehydes with the puff volume from 20 mL/puff to 60 mL/puff.

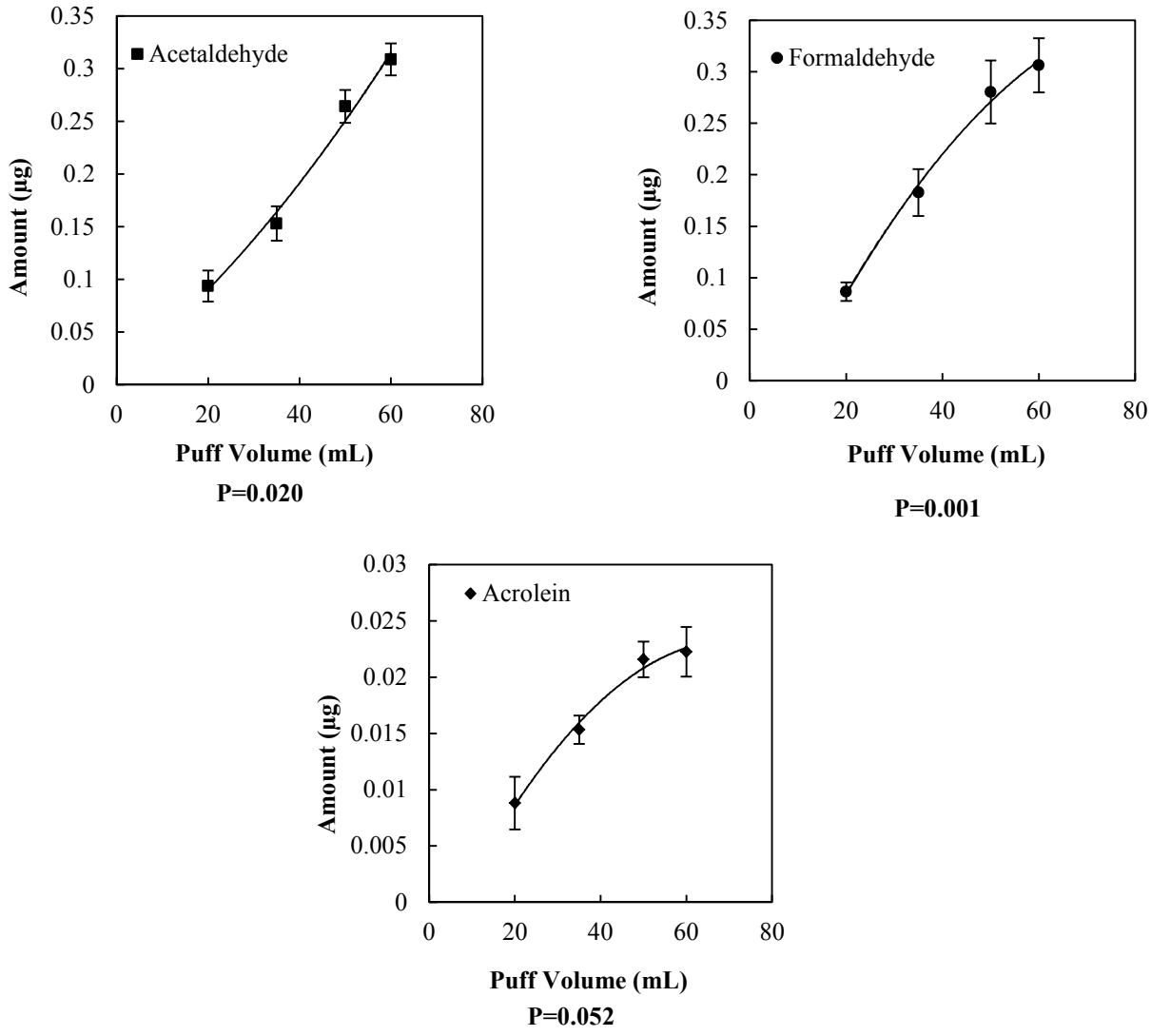

Figure S3. The effect of puff duration on the amount of acetaldehyde, formaldehyde and acrolein generated in vapors of Blu e-cigarette with a Magnificent Menthol cartridge with 16 mg of nicotine at a fixed puff volume of 35 ml and puff frequency 1/30s for 10 puffs. P values for the amounts aldehydes with the puff duration from 1 sec to 4 sec.

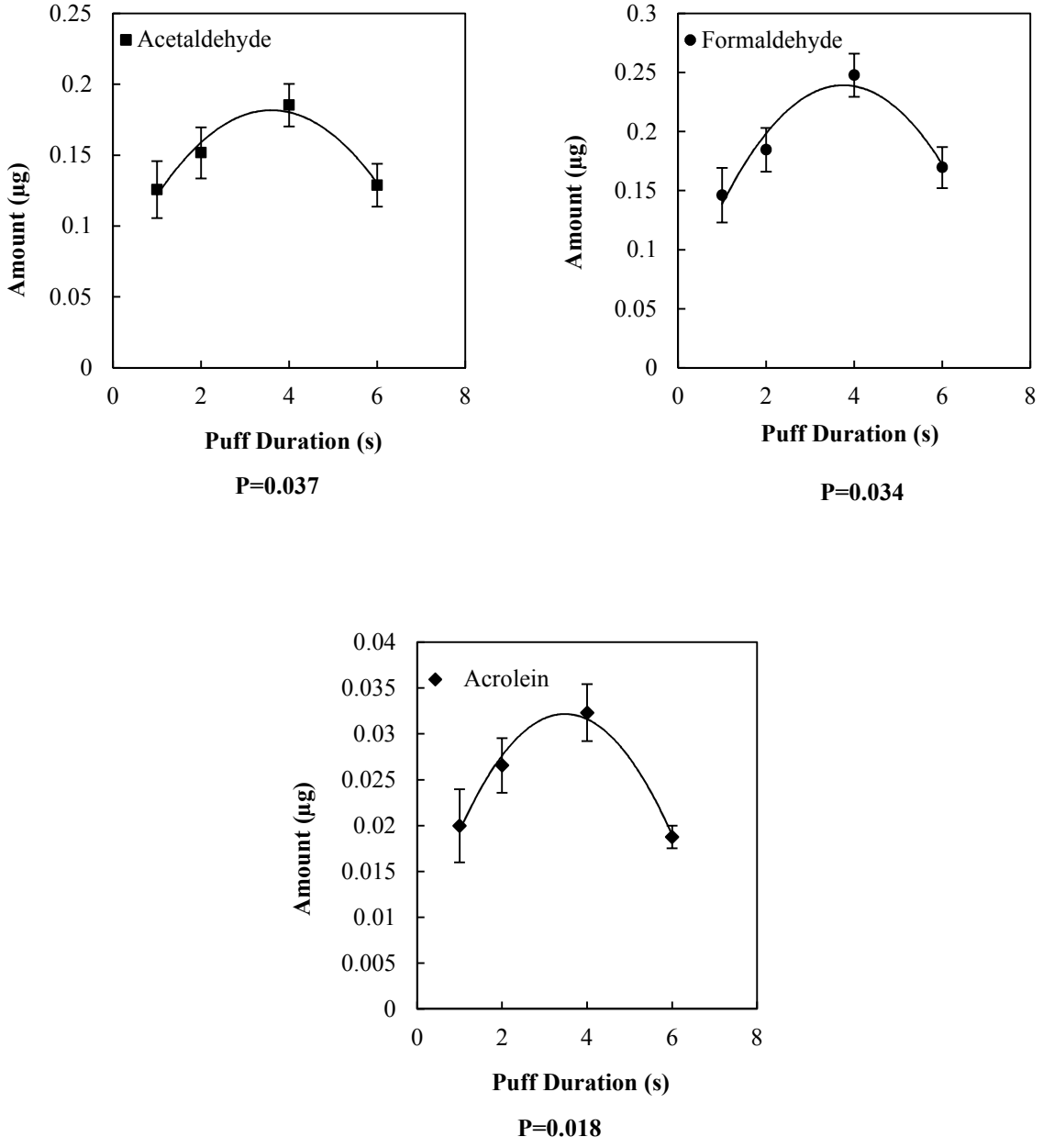

Figure S4. The effect of puff duration on the amount of acetaldehyde, formaldehyde and acrolein generated in vapors of Blu e-cigarette with a Classic Tobacco cartridge with 16 mg of nicotine at a fixed puff volume of 35 ml and puff frequency 1/30s for 10 puffs. P values for the amounts aldehydes with the puff duration from 1 sec to 4 sec.