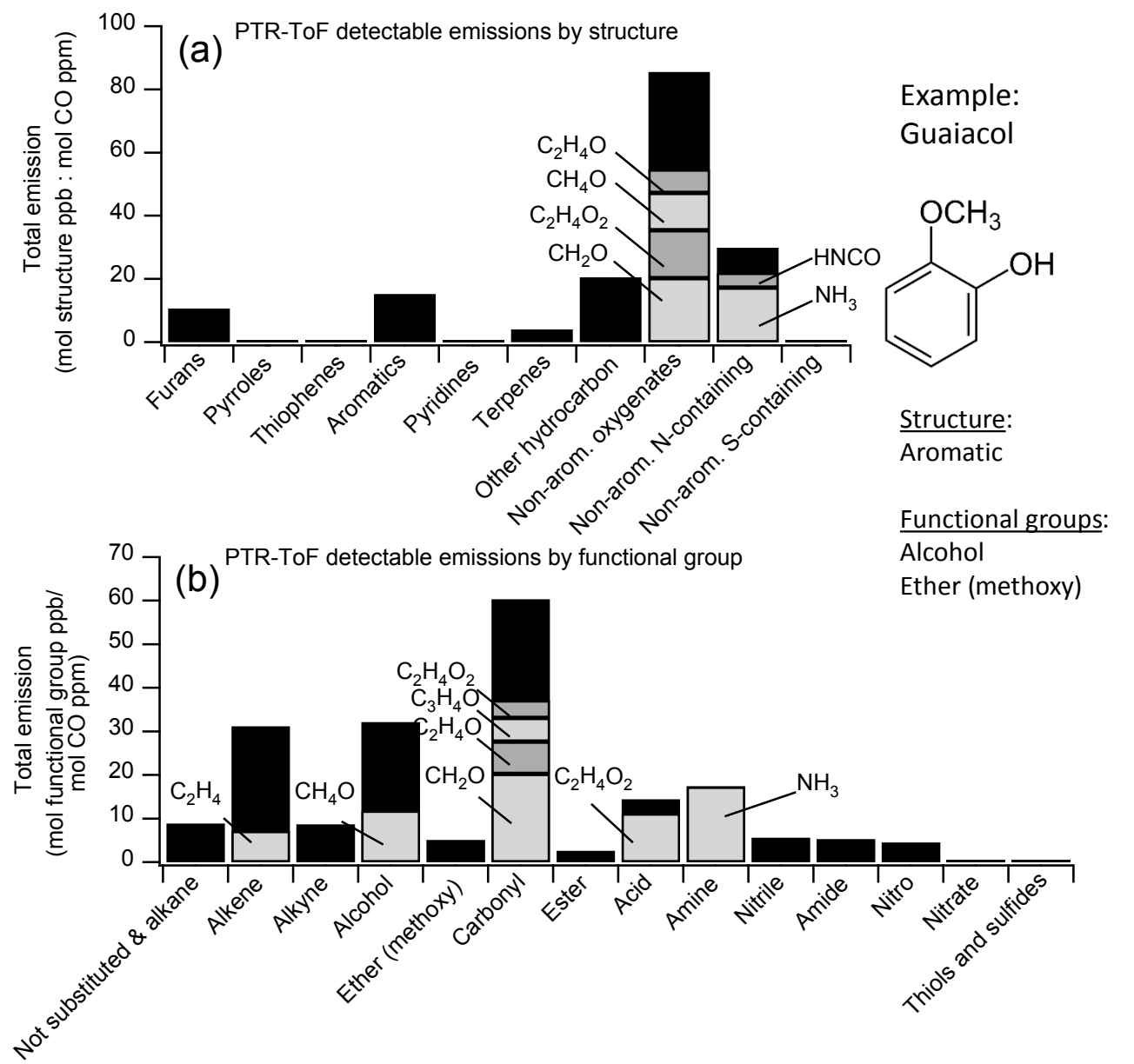
(a)
PTR-ToF detectable emissions by structure
Total emission
(mol structure ppb : mol CO ppm)
100
80
60
40
20
0
C_2H_4O
CH_4O
$C_2H_4O_2$
CH_2O
HNCO
NH_3
Furans
Pyrroles
Thiophenes
Aromatics
Pyridines
Terpenes
Other hydrocarbon
Non-arom. oxygenates
Non-arom. N-containing
Non-arom. S-containing
Example:
Guaiacol
OCH_3
OH
Structure:
Aromatic
Functional groups:
Alcohol
Ether (methoxy)
(b)
PTR-ToF detectable emissions by functional group
Total emission
(mol functional group ppb/
mol CO ppm)
70
60
50
40
30
20
10
0
$C_2H_4O_2$
C_3H_4O
C_2H_4O
C_2H_4
CH_4O
CH_2O
$C_2H_4O_2$
NH_3
Not substituted & alkane
Alkene
Alkyne
Alcohol
Ether (methoxy)
Carbonyl
Ester
Acid
Amine
Nitrile
Amide
Nitro
Nitrate
Thiols and sulfides