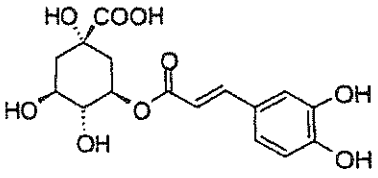
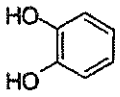
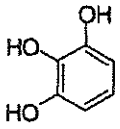
## Figures



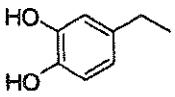
5-O-caffeoylquinic acid



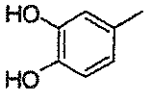
Catechol



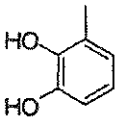
Pyrogallol



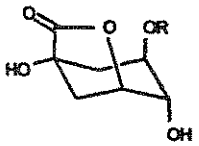
4-Ethylcatechol



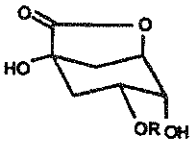
4-Methylcatechol



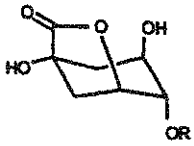
3-Methylcatechol



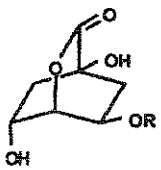
5-O-caffeoyl-*muco*-γ-Chinid



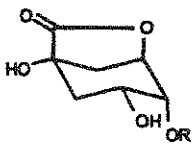
3-O-caffeoyl-γ-Chinid



4-O-caffeoyl-*muco*-γ-Chinid



5-O-caffeoyl-*epi*-δ-Chinid



4-O-caffeoyl-γ-Chinid

Figure 1

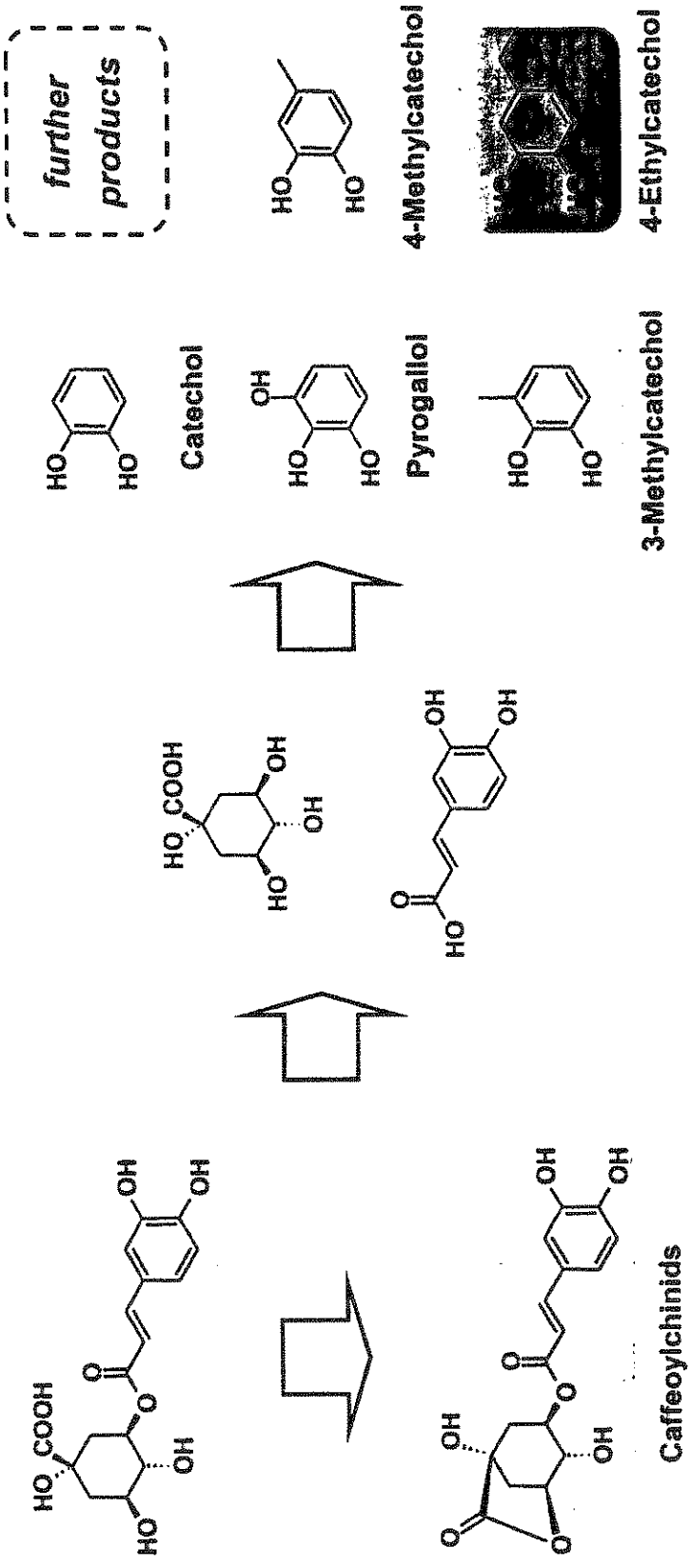

Caffeoylchinids
Catechol
Pyrogallol
3-Methylcatechol
4-Methylcatechol
4-Ethylcatechol
further products

Figure 2

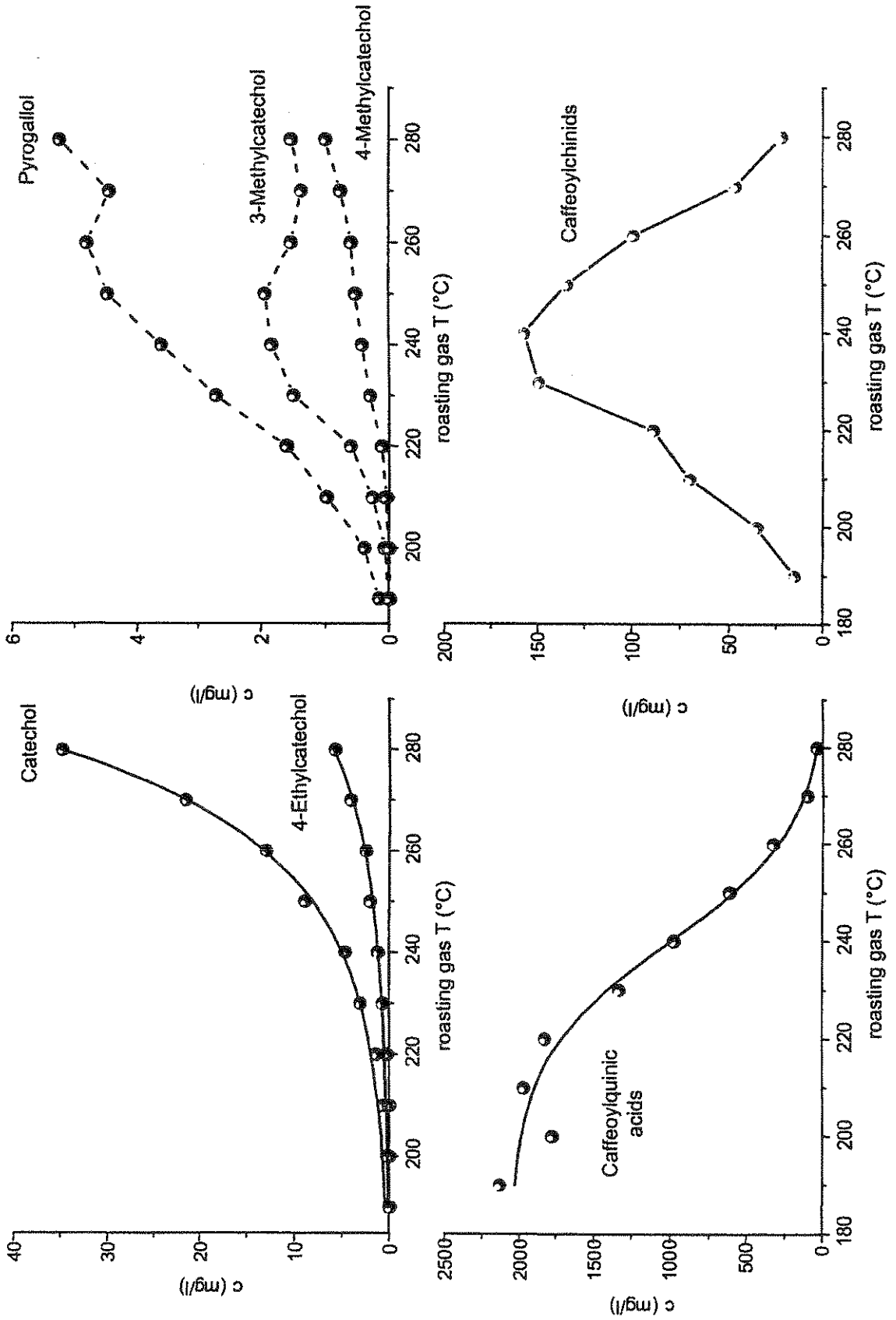

Pyrogallol
3-Methylcatechol
4-Methylcatechol
Catechol
4-Ethylcatechol
Caffeoylchinids
Caffeoylquinic acids
c (mg/l)
roasting gas T (°C)

Figure 3

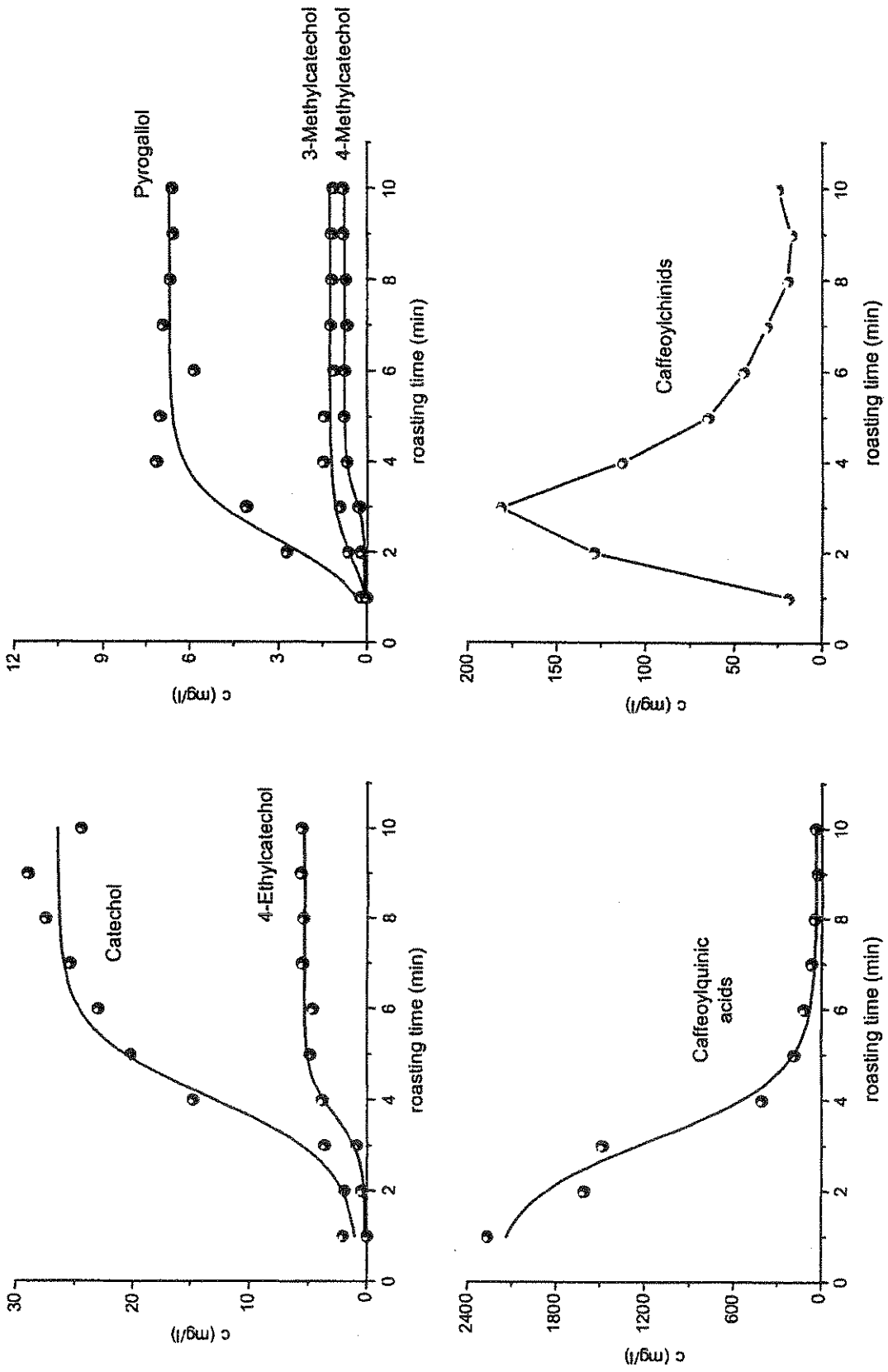

Pyrogallol
3-Methylcatechol
4-Methylcatechol
c (mg/l)
roasting time (min)
Caffeoylchinids
Catechol
4-Ethylcatechol
Caffeoylquinic acids

Figure 4

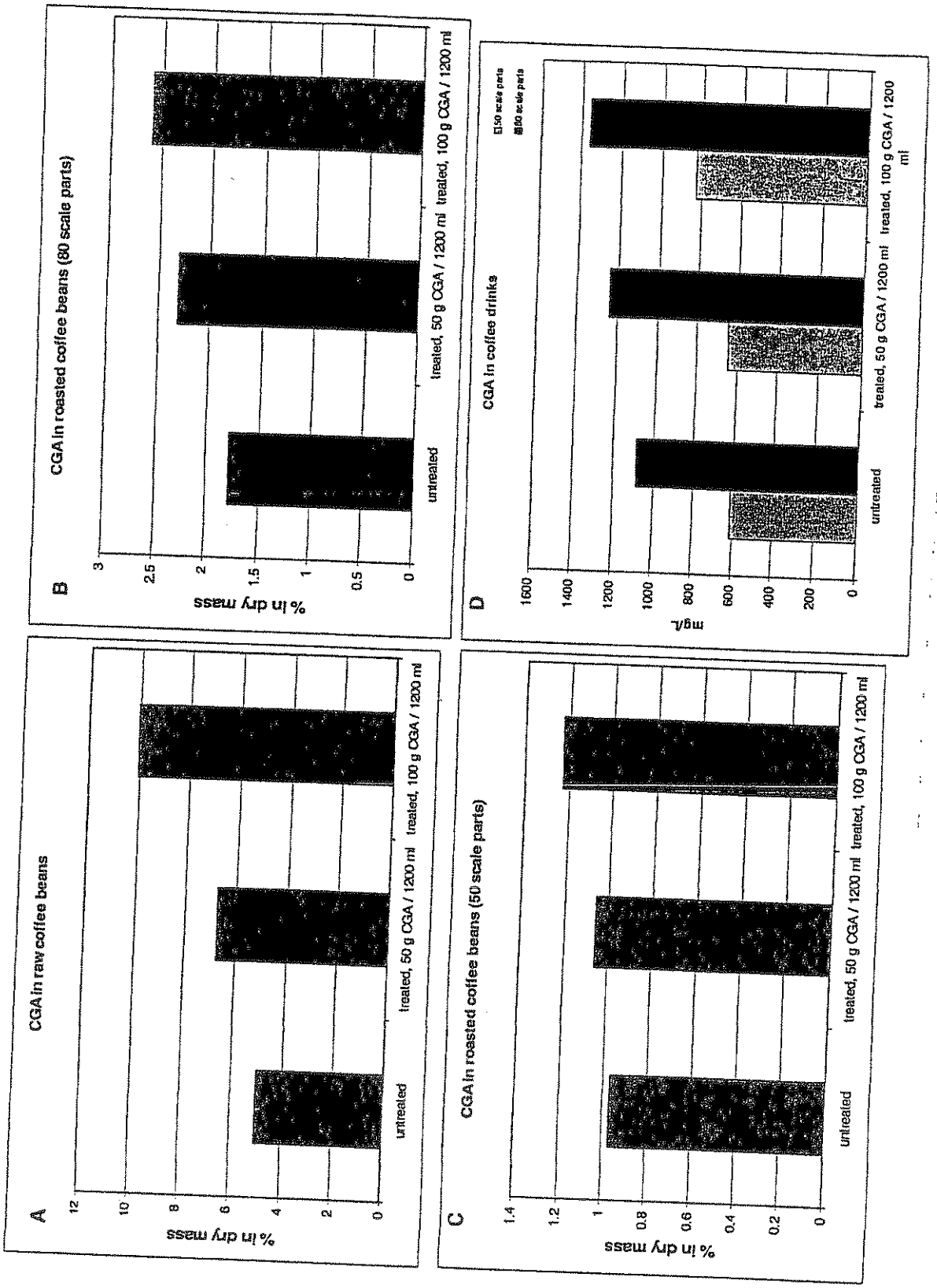
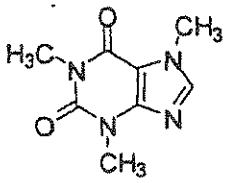
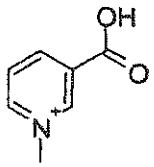

A
CGA in raw coffee beans
% in dry mass
untreated
treated, 50 g CGA / 1200 ml
treated, 100 g CGA / 1200 ml
B
CGA in roasted coffee beans (80 scale parts)
% in dry mass
untreated
treated, 50 g CGA / 1200 ml
treated, 100 g CGA / 1200 ml
C
CGA in roasted coffee beans (50 scale parts)
% in dry mass
untreated
treated, 50 g CGA / 1200 ml
treated, 100 g CGA / 1200 ml
D
CGA in coffee drinks
50 scale parts
80 scale parts
mg/L
untreated
treated, 50 g CGA / 1200 ml
treated, 100 g CGA / 1200 ml

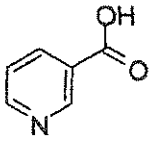
Figure 5



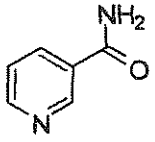
Caffeine



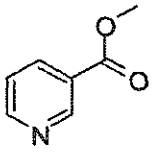
Trigonelline



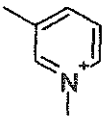
Nicotinic acid



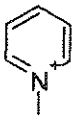
Nicotinamide



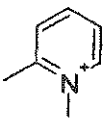
Methylnicotinate



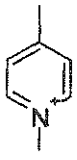
N-methyl-3-picolinium



N-methylpyridinium



N-methyl-2-picolinium



N-methyl-4-picolinium

Figure 6

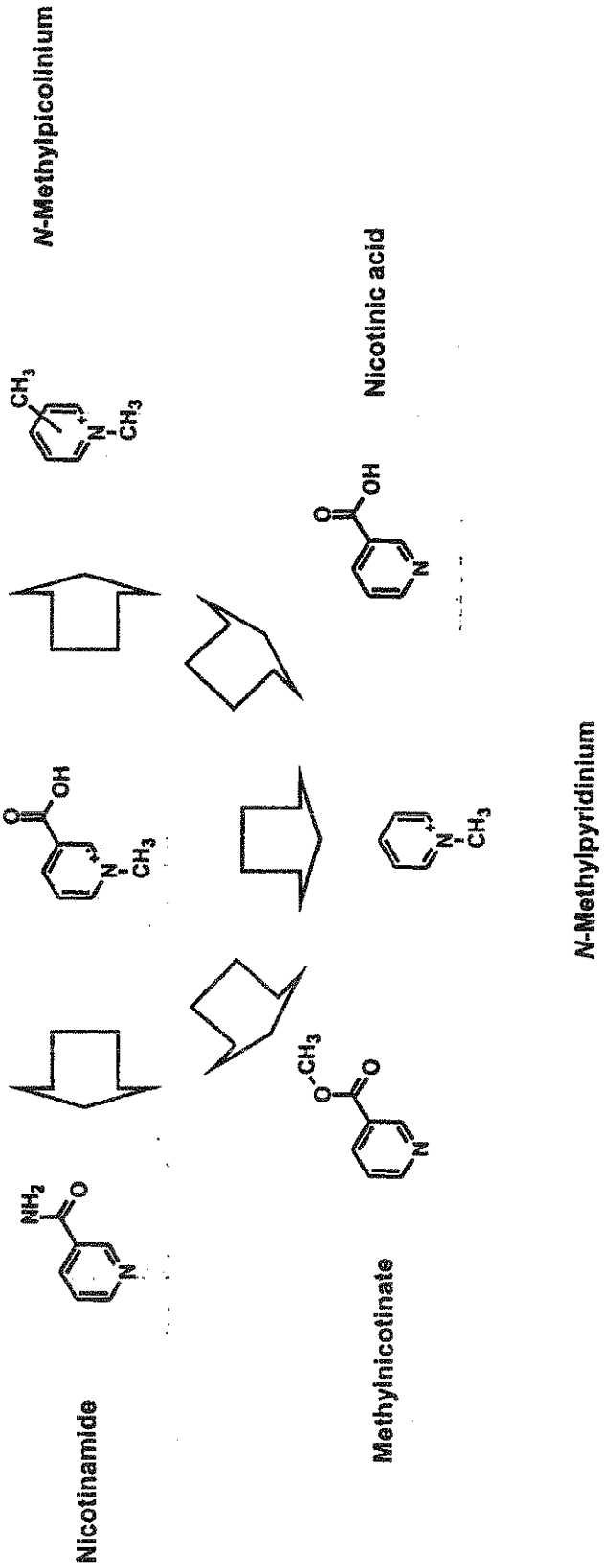

N-Methylpicolinium
Nicotinic acid
N-Methylpyridinium
Nicotinamide
Methylnicotinate

Figure 7

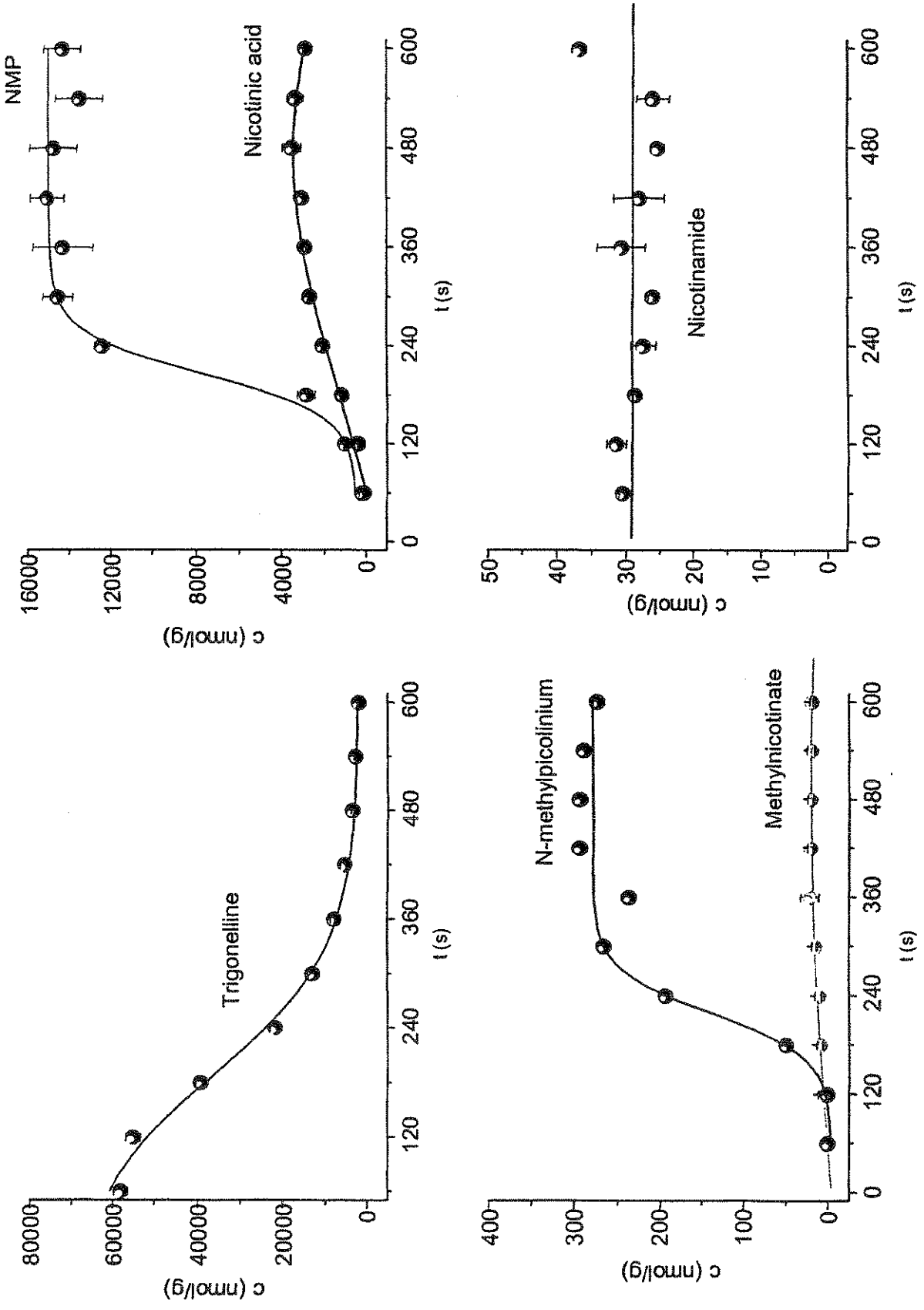

NMP
Nicotinic acid
Nicotinamide
Trigonelline
N-methylpicolinium
Methylnicotinate
c (nmol/g)
t (s)

Figure 8