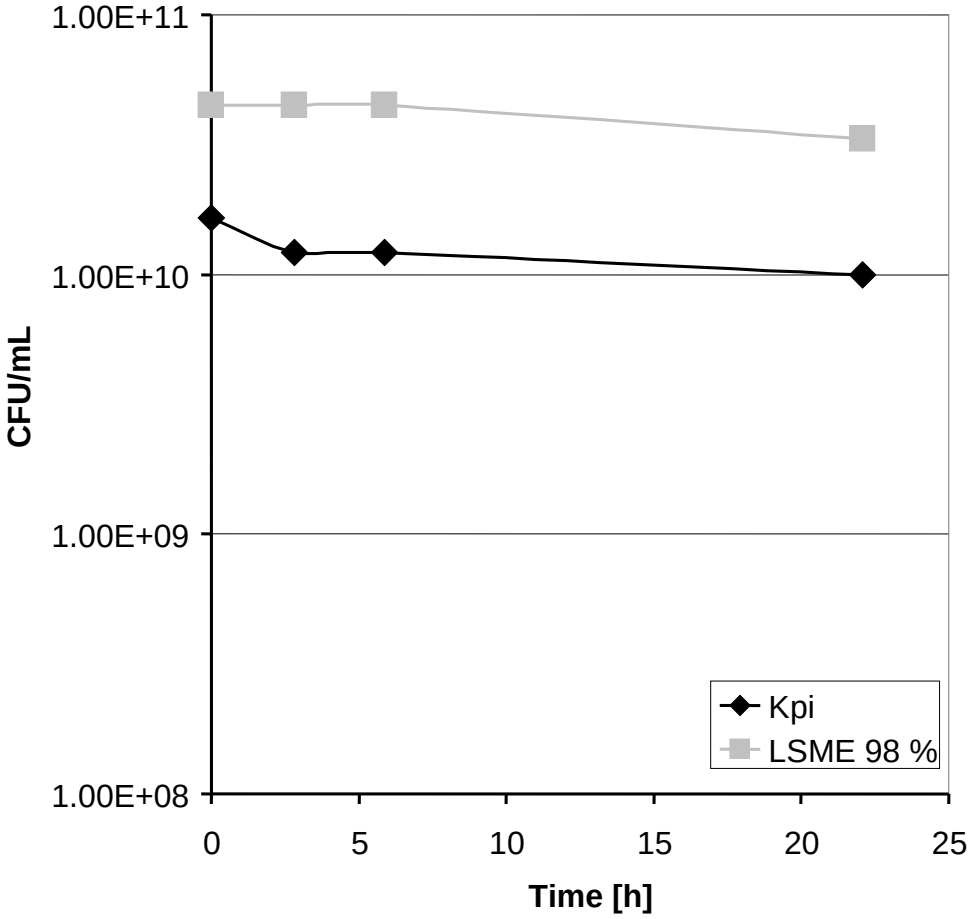

1.00E+11
1.00E+10
1.00E+09
1.00E+08
CFU/mL
0
5
10
15
20
25
Time [h]
Kpi
LSME 98 %

Figure 1

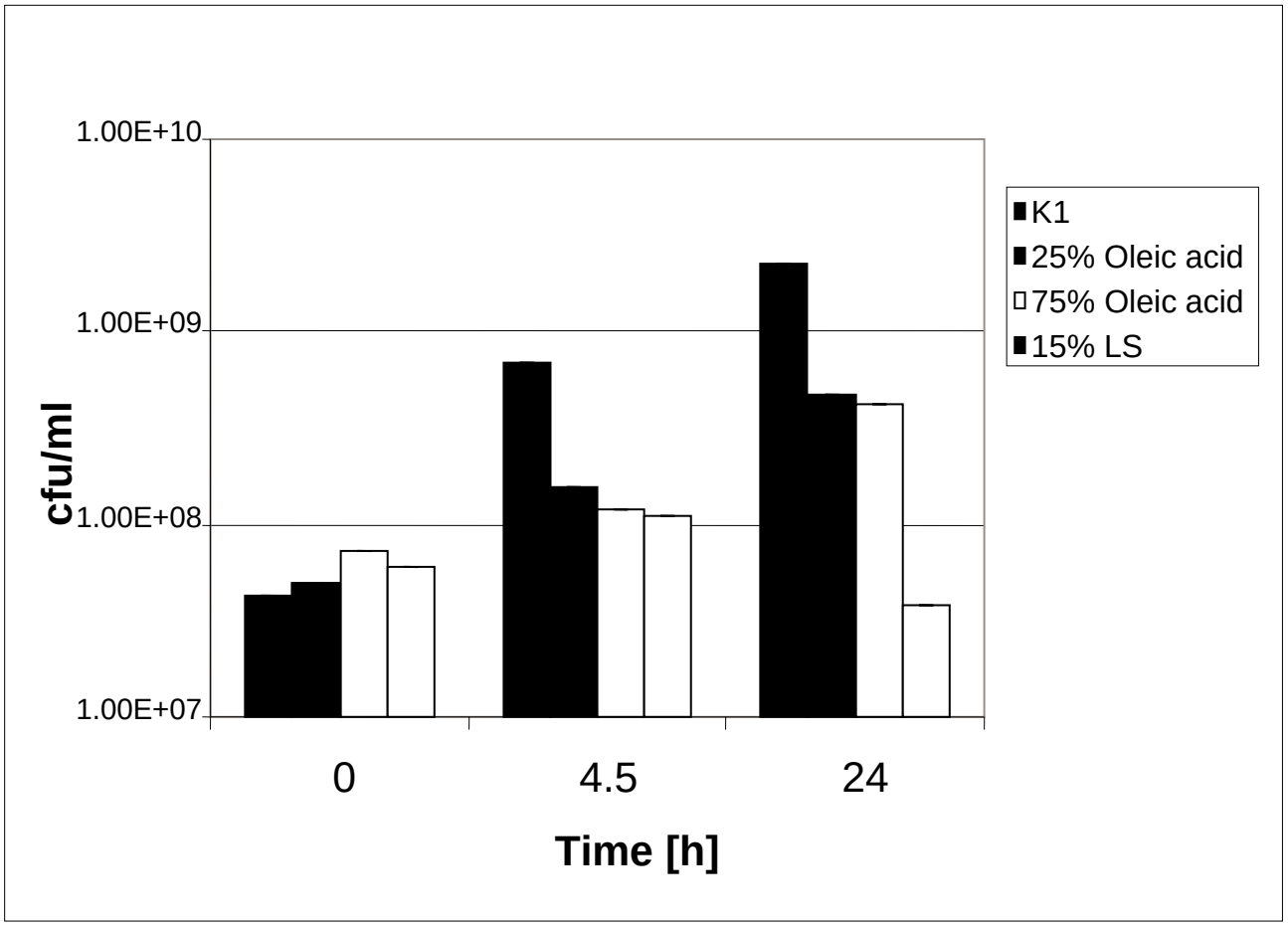

1.00E+10
1.00E+09
1.00E+08
1.00E+07
cfu/ml
0
4.5
24
Time [h]
K1
25% Oleic acid
75% Oleic acid
15% LS

Figure 2

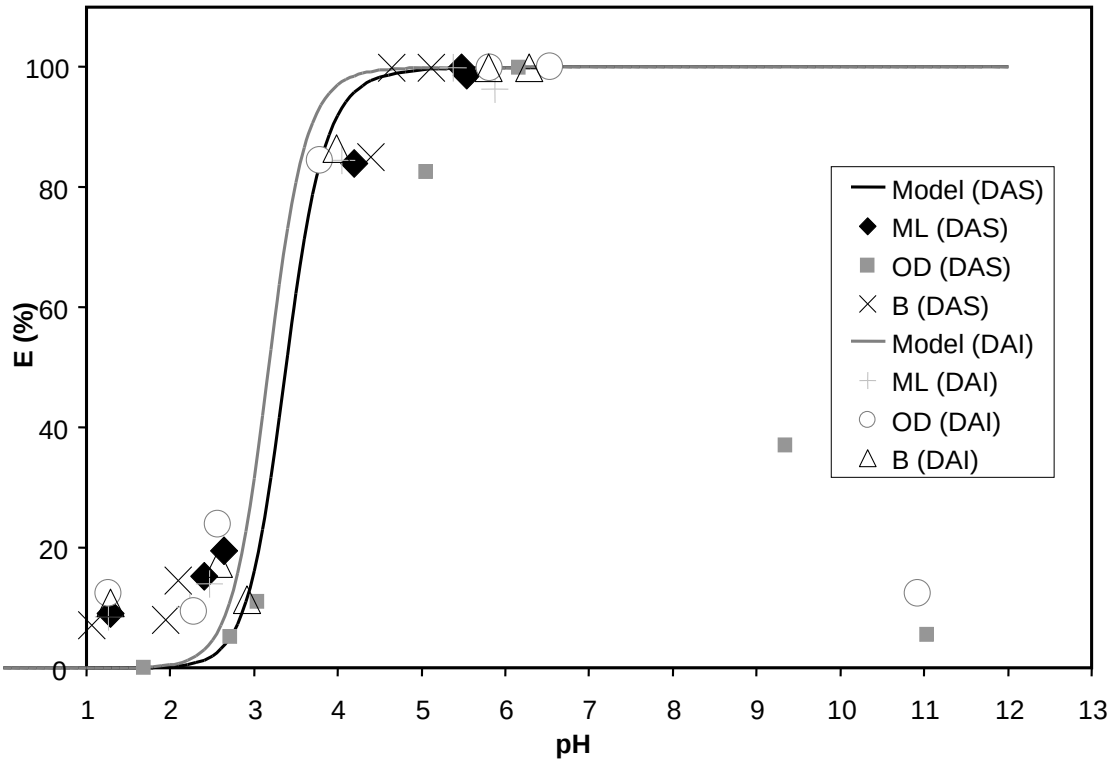


Figure 3 a

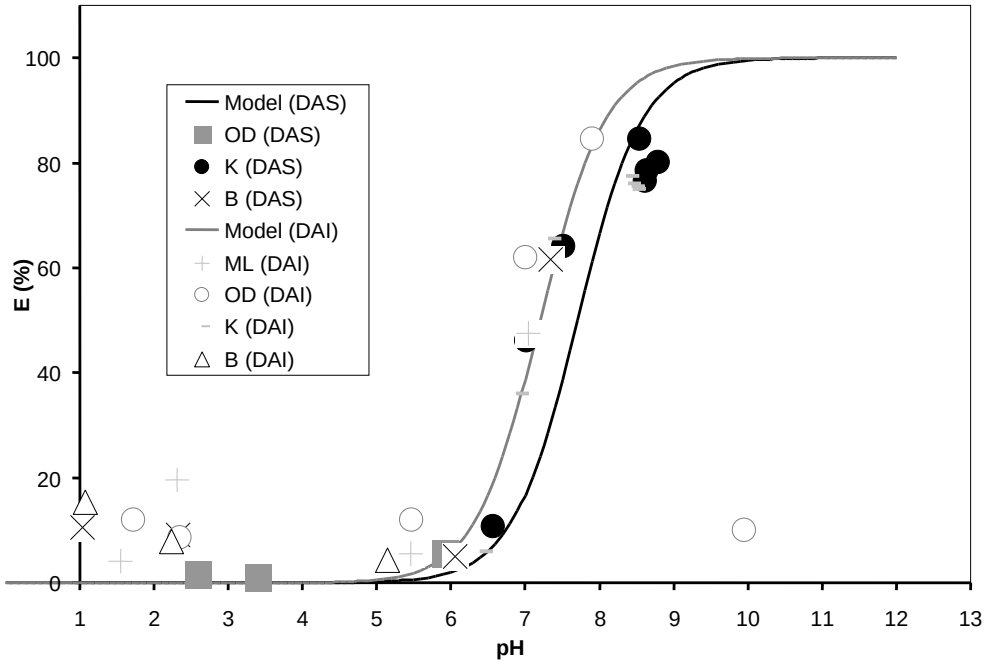


Figure 3 b

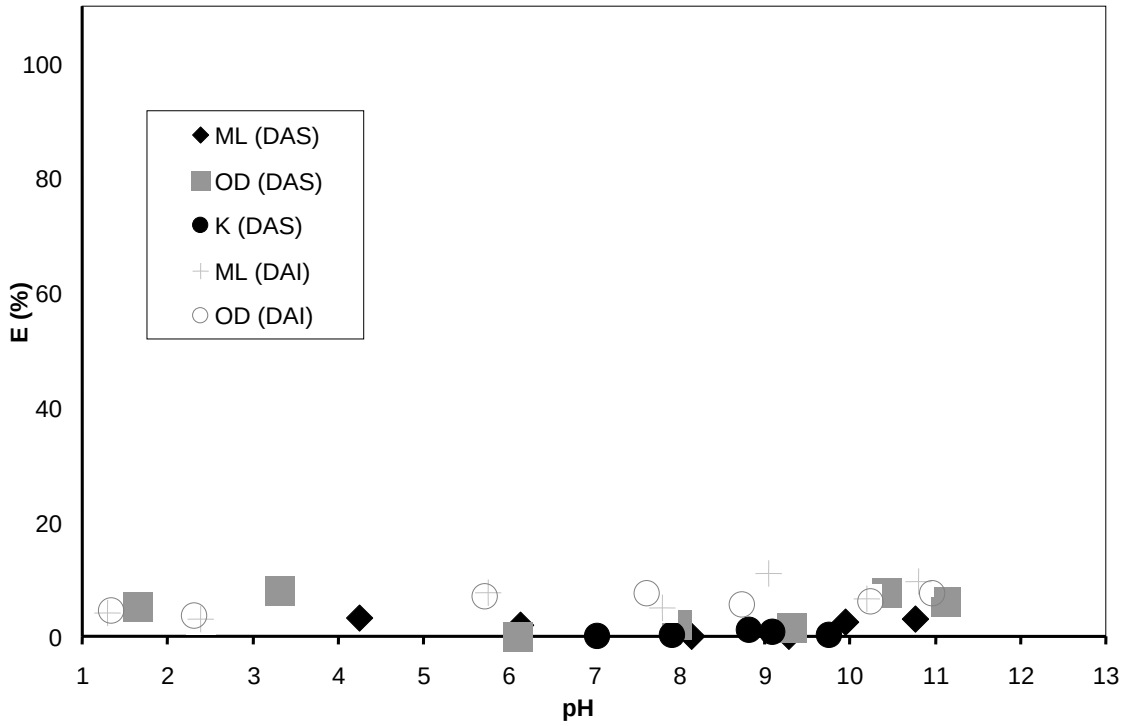

100
80
60
40
20
0
E (%)
1
2
3
4
5
6
7
8
9
10
11
12
13
pH
ML (DAS)
OD (DAS)
K (DAS)
ML (DAI)
OD (DAI)

Figure 3 c

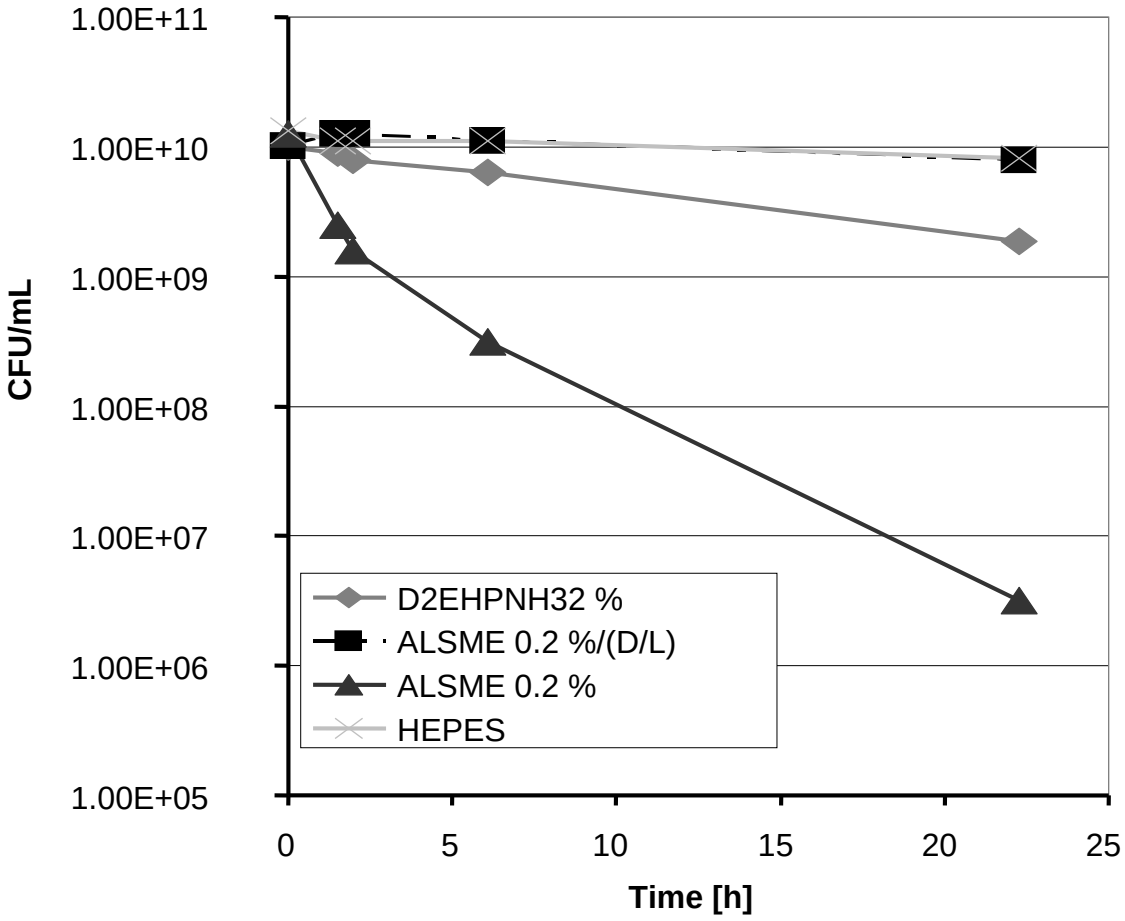
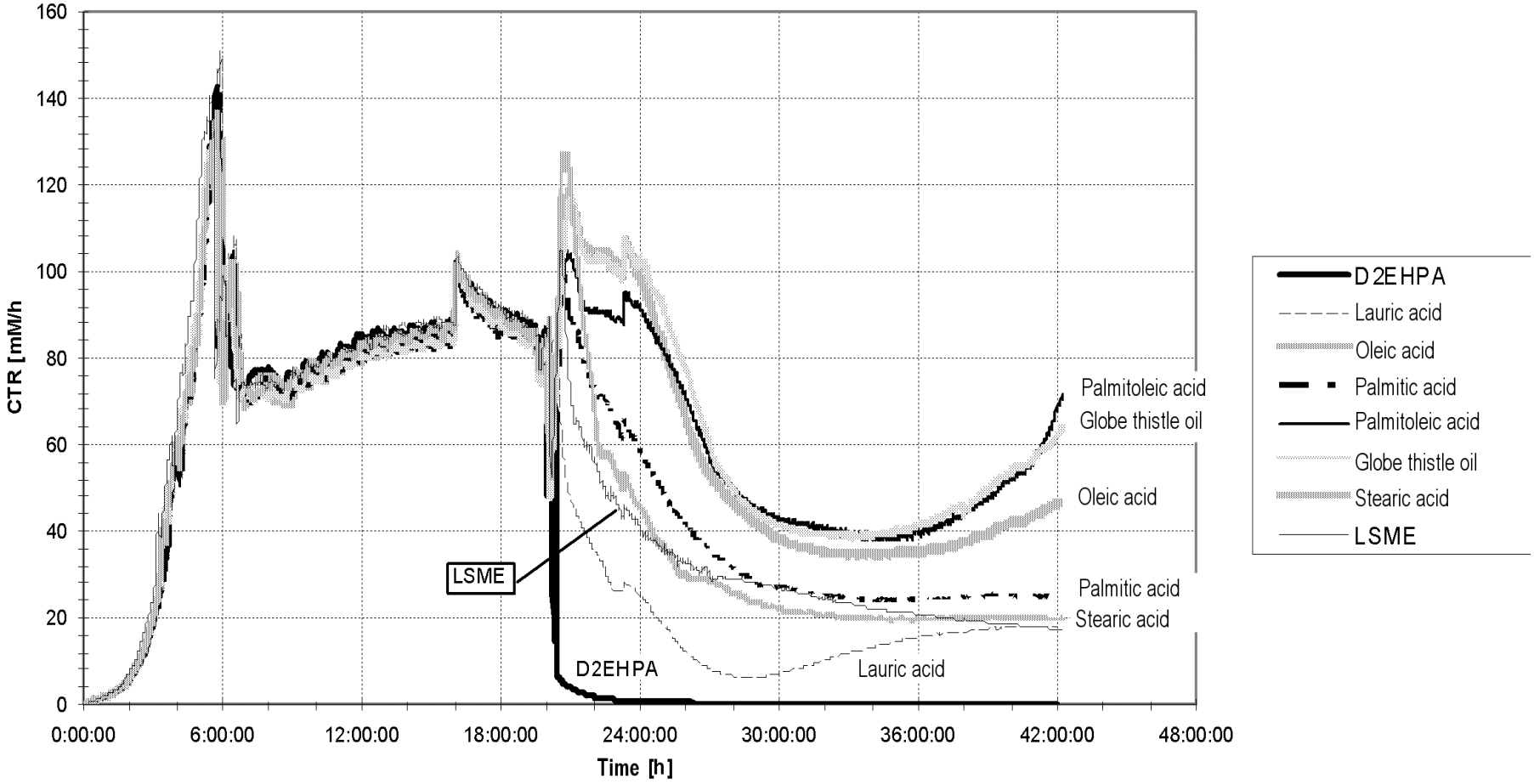

1.00E+11
1.00E+10
1.00E+09
1.00E+08
1.00E+07
1.00E+06
1.00E+05
CFU/mL
0
5
10
15
20
25
Time [h]
D2EHPNH32 %
ALSME 0.2 %/(D/L)
ALSME 0.2 %
HEPES

Figure 4


160
140
120
100
80
60
40
20
0
CTR [mM/h
0:00:00
6:00:00
12:00:00
18:00:00
24:00:00
30:00:00
36:00:00
42:00:00
48:00:00
Time [h]
LSME
D2EHPA
Lauric acid
Palmitoleic acid
Globe thistle oil
Oleic acid
Palmitic acid
Stearic acid
D2EHPA
Lauric acid
Oleic acid
Palmitic acid
Palmitoleic acid
Globe thistle oil
Stearic acid
LSME

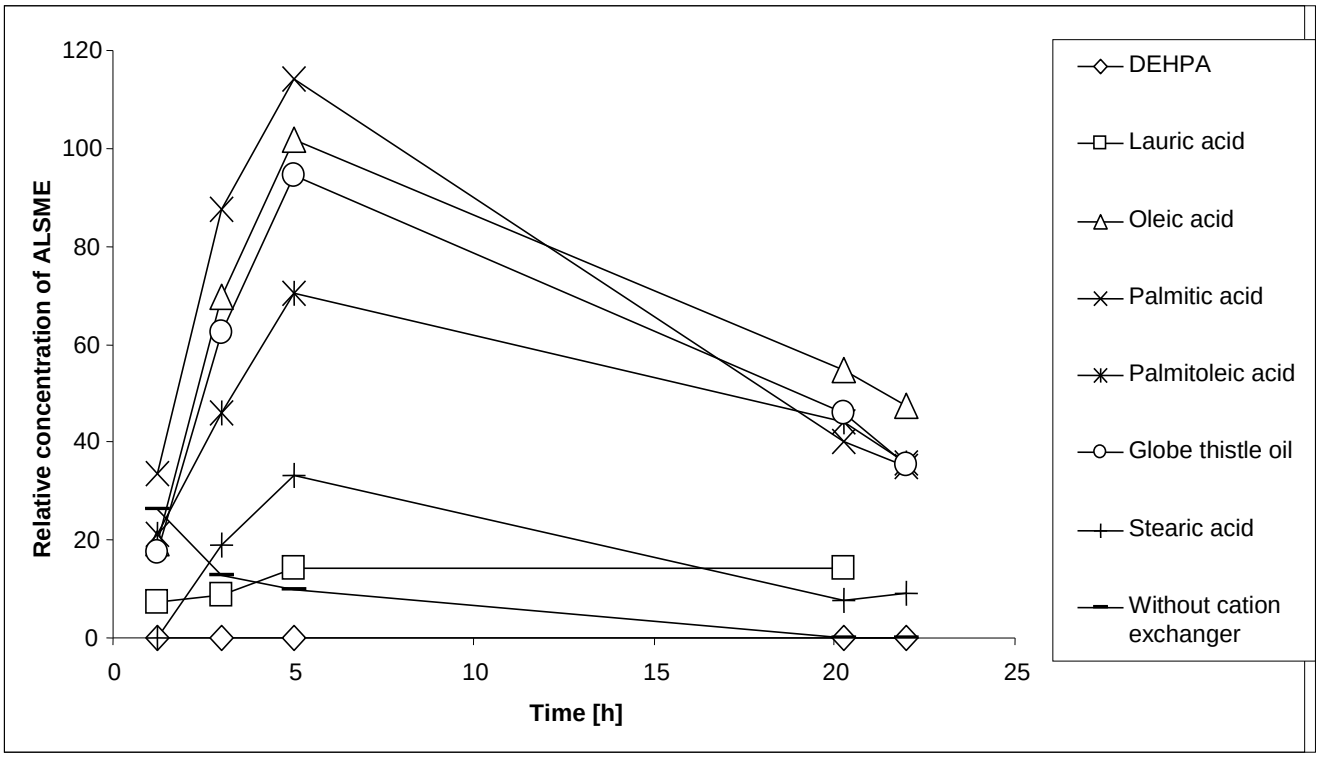

120
100
80
60
40
20
0
Relative concentration of ALSME
0
5
10
15
20
25
Time [h]
DEHPA
Lauric acid
Oleic acid
Palmitic acid
Palmitoleic acid
Globe thistle oil
Stearic acid
Without cation exchanger

Figure 6