Fig. 1

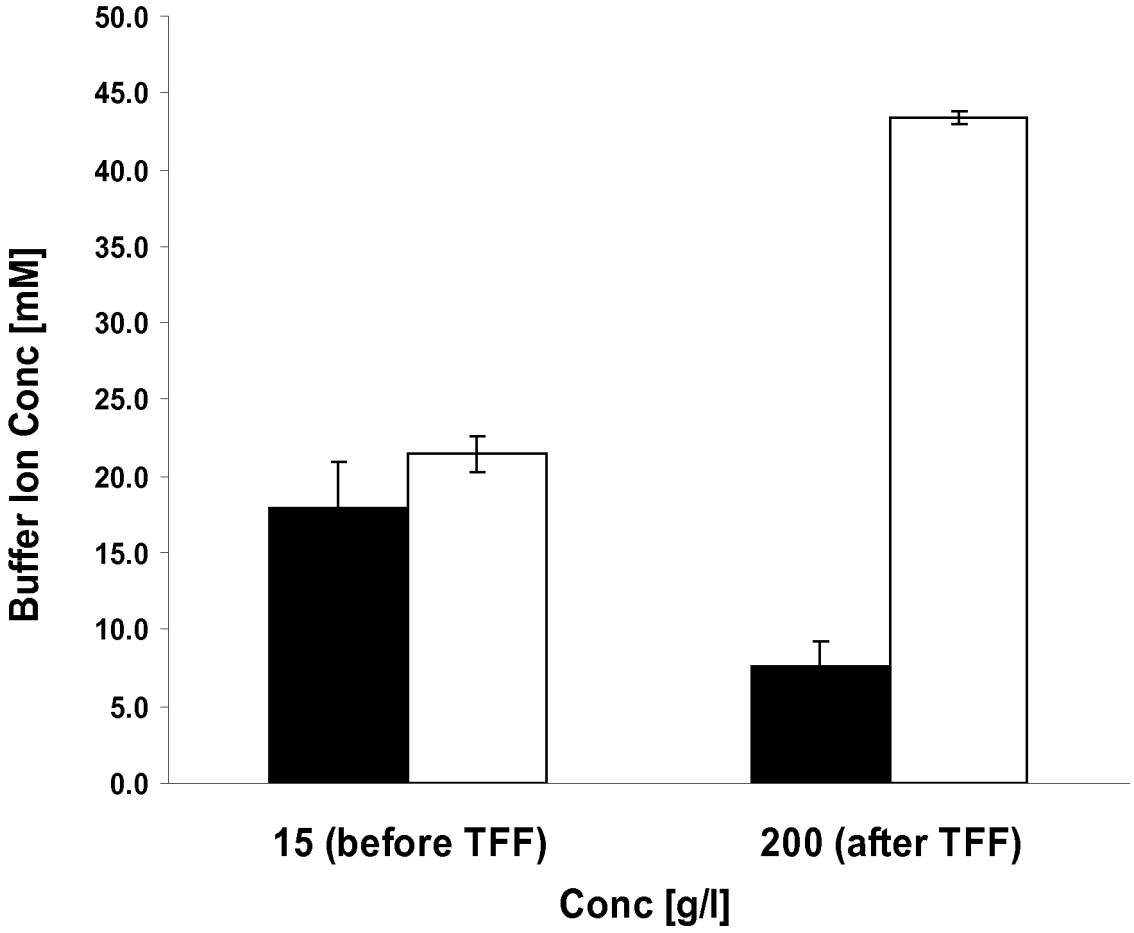

50.0
45.0
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
Buffer Ion Conc [mM]
15 (before TFF)
200 (after TFF)
Conc [g/l]

Fig. 2

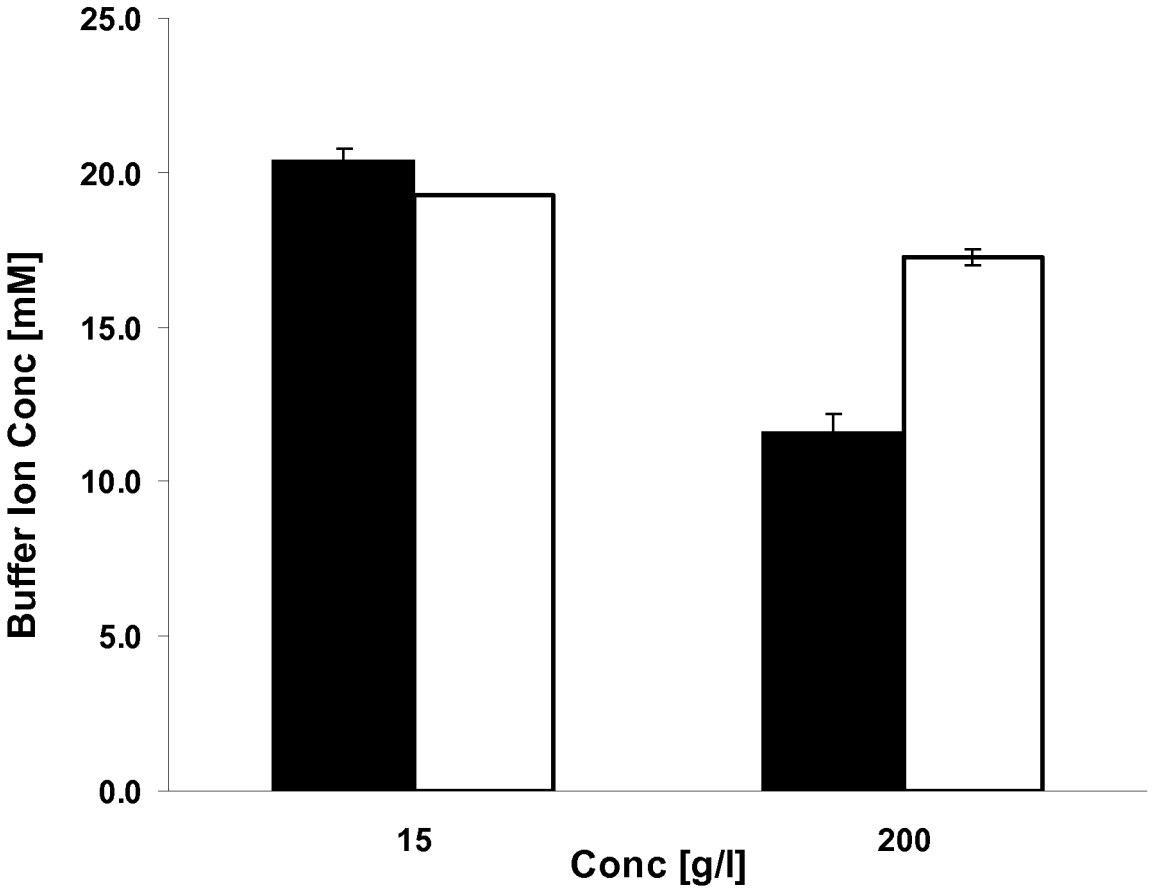


Fig. 3

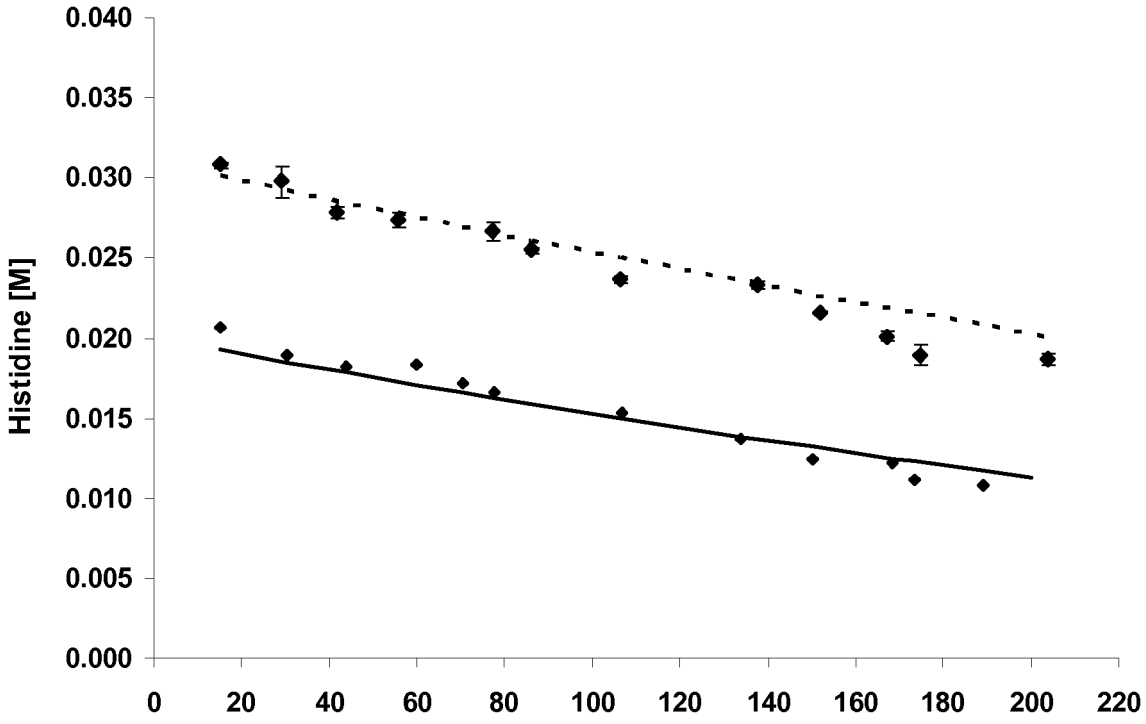

Histidine [M]
0.040
0.035
0.030
0.025
0.020
0.015
0.010
0.005
0.000
0
20
40
60
80
100
120
140
160
180
200
220

Fig. 4

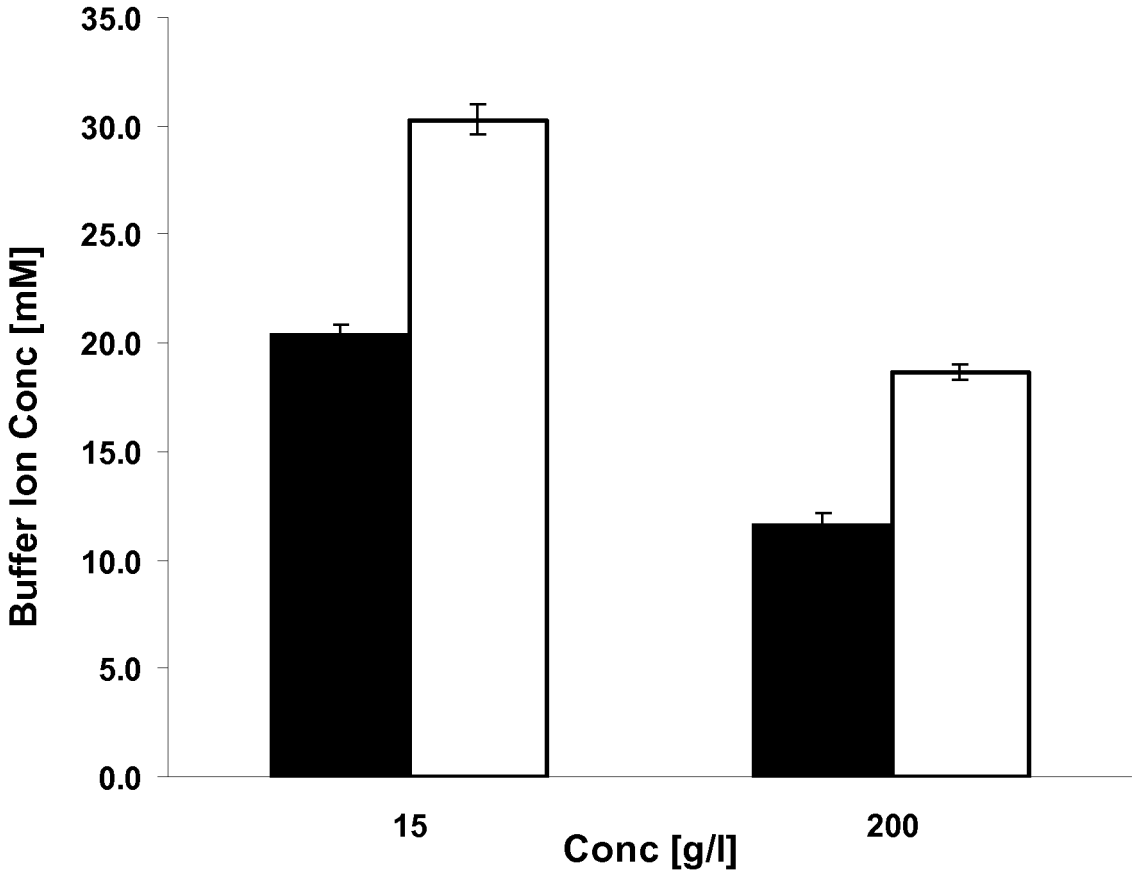


Fig. 5

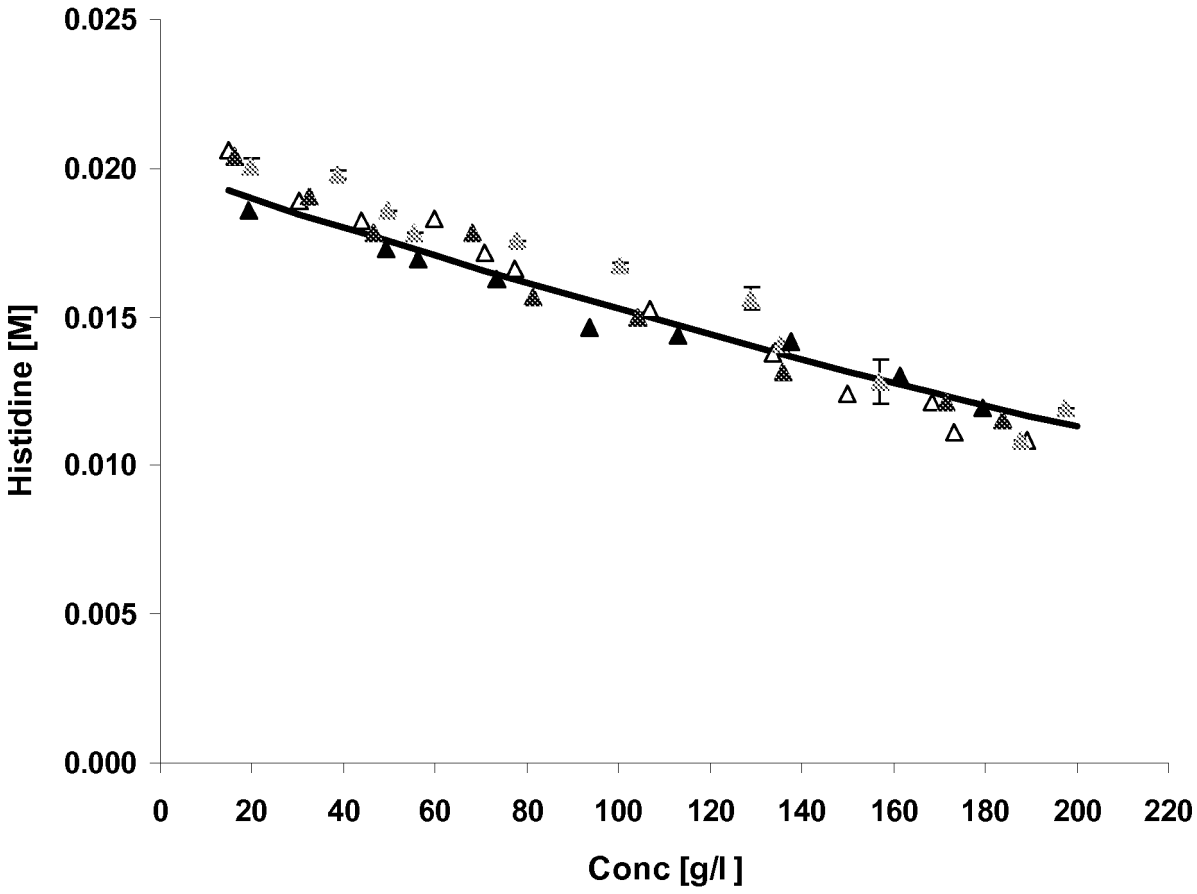

0.025
0.020
0.015
0.010
0.005
0.000
Histidine [M]
0
20
40
60
80
100
120
140
160
180
200
220
Conc [g/l]

Fig. 6

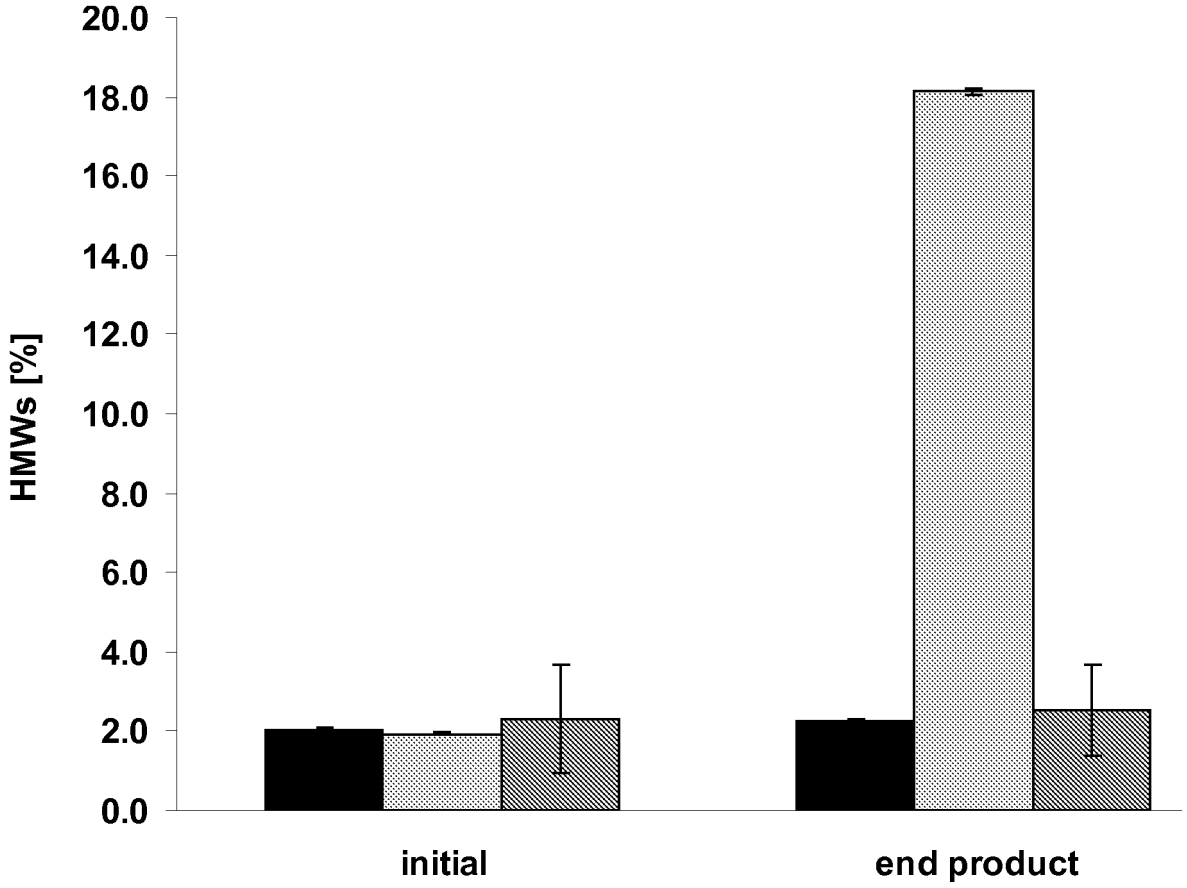


Fig. 7

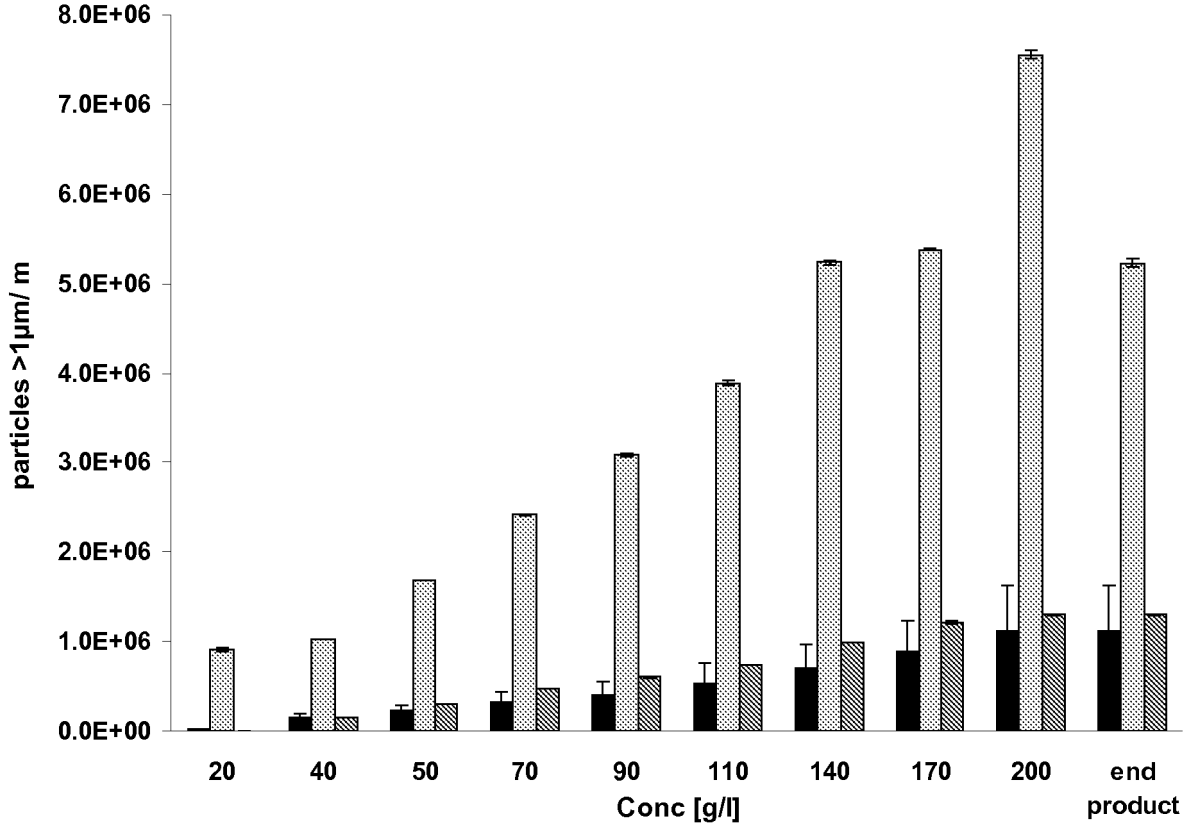

8.0E+06
7.0E+06
6.0E+06
5.0E+06
4.0E+06
3.0E+06
2.0E+06
1.0E+06
0.0E+00
particles >1µm/ m
20
40
50
70
90
110
140
170
200
end product
Conc [g/l]

Fig. 8

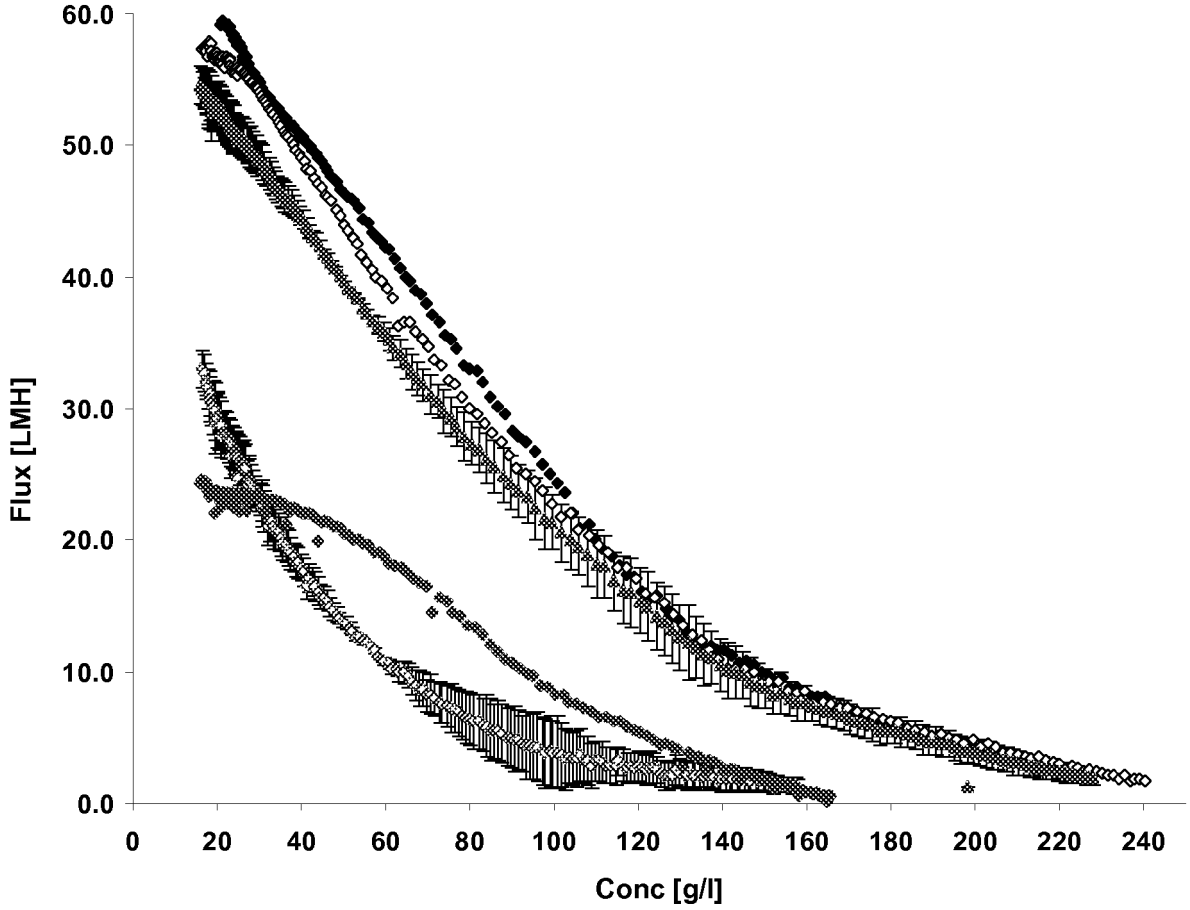

60.0
50.0
40.0
30.0
20.0
10.0
0.0
Flux [LMH]
0
20
40
60
80
100
120
140
160
180
200
220
240
Conc [g/l]

Fig. 9

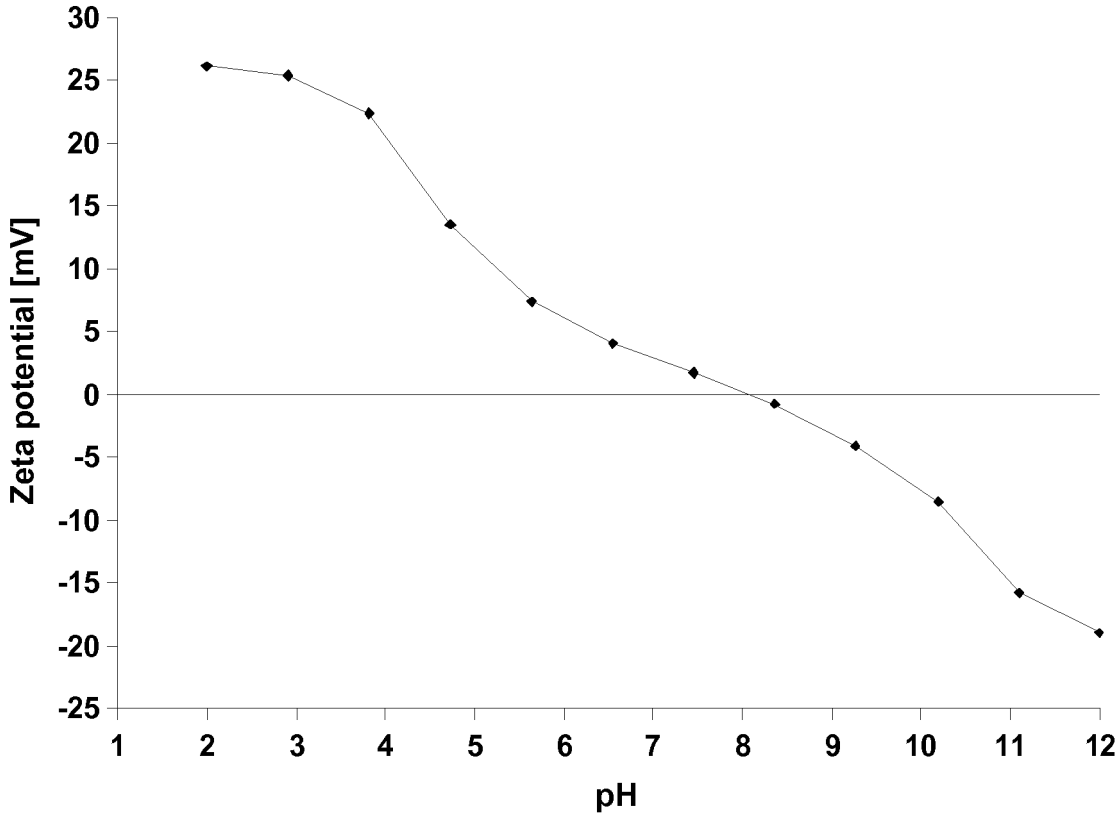
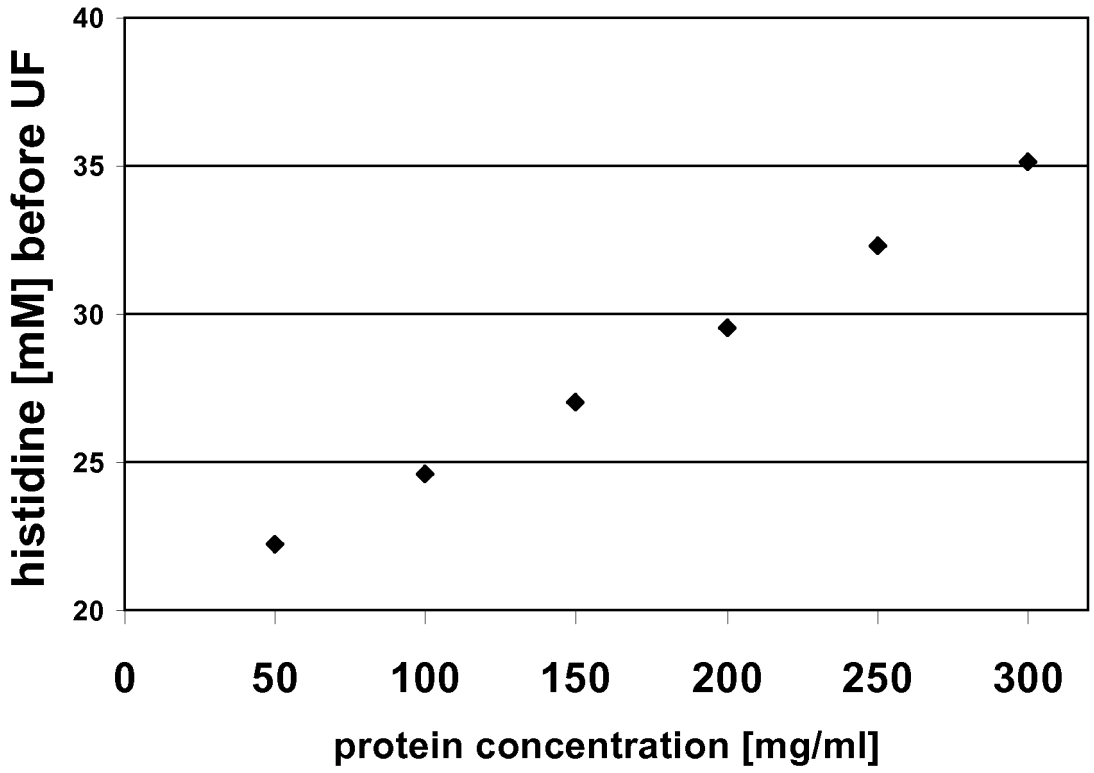

Zeta potential [mV]
30
25
20
15
10
5
0
-5
-10
-15
-20
-25
1
2
3
4
5
6
7
8
9
10
11
12
pH

Fig. 10


histidine [mM] before UF
40
35
30
25
20
0
50
100
150
200
250
300
protein concentration [mg/ml]