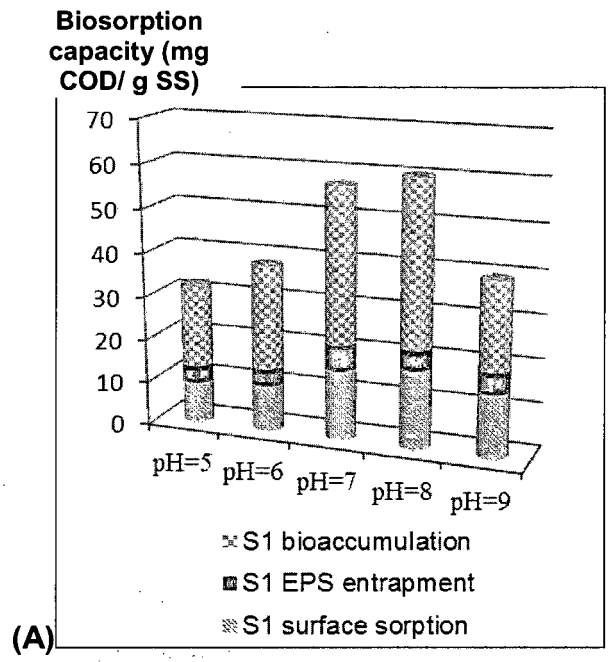
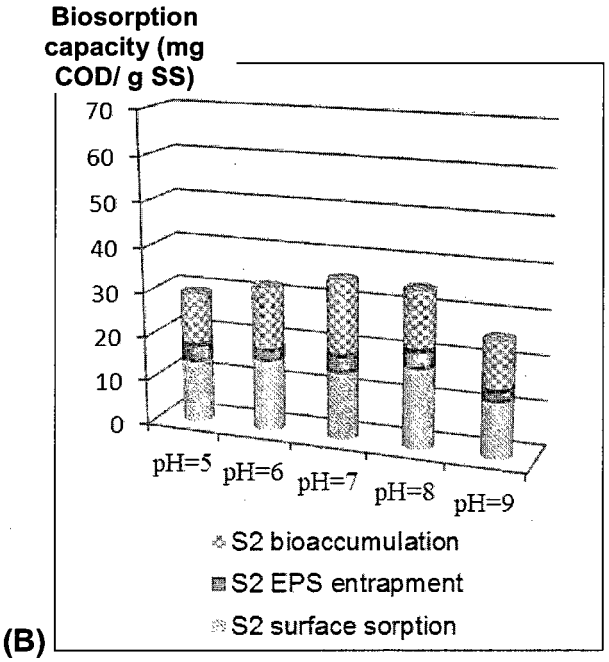

Biosorption capacity (mg COD/ g SS)
70
60
50
40
30
20
10
0
pH=5
pH=6
pH=7
pH=8
pH=9
S1 bioaccumulation
S1 EPS entrapment
S1 surface sorption

(A)


Biosorption capacity (mg COD/ g SS)
70
60
50
40
30
20
10
0
pH=5
pH=6
pH=7
pH=8
pH=9
S2 bioaccumulation
S2 EPS entrapment
S2 surface sorption

(B)

Fig. 1

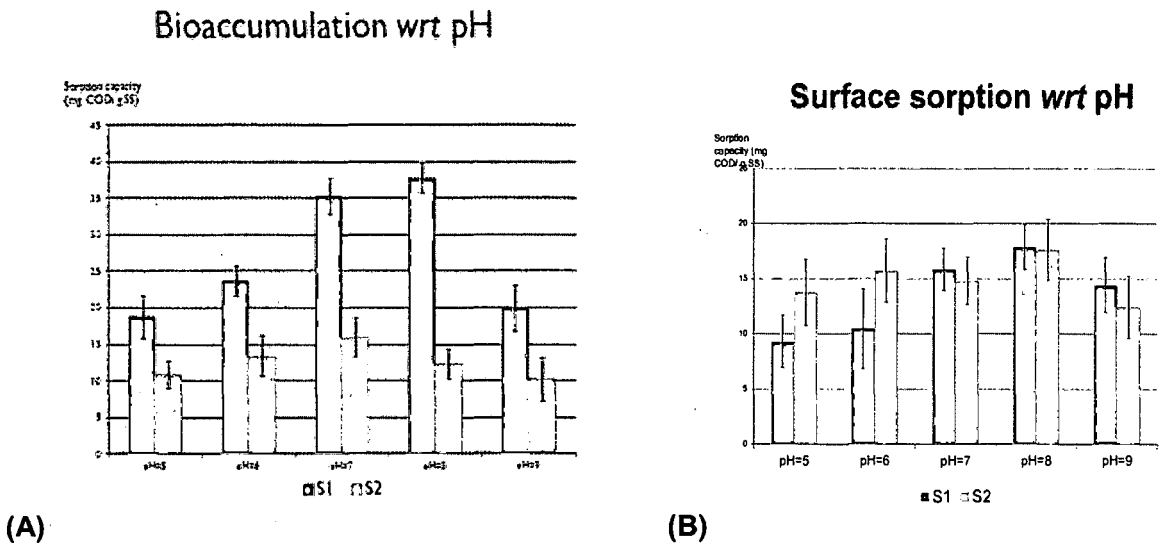

Bioaccumulation wrt pH
Surface sorption wrt pH
pH=5
pH=6
pH=7
pH=8
pH=9
S1
S2
(A)
(B)

Fig. 2

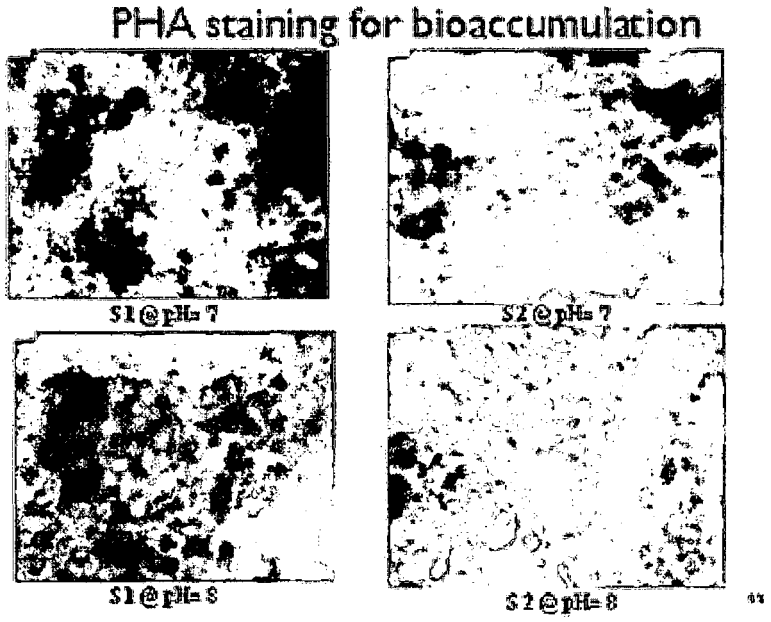

PHA staining for bioaccumulation
S1@pH=7
S2@pH=7
S1@pH=8
S2@pH=8

Fig. 3

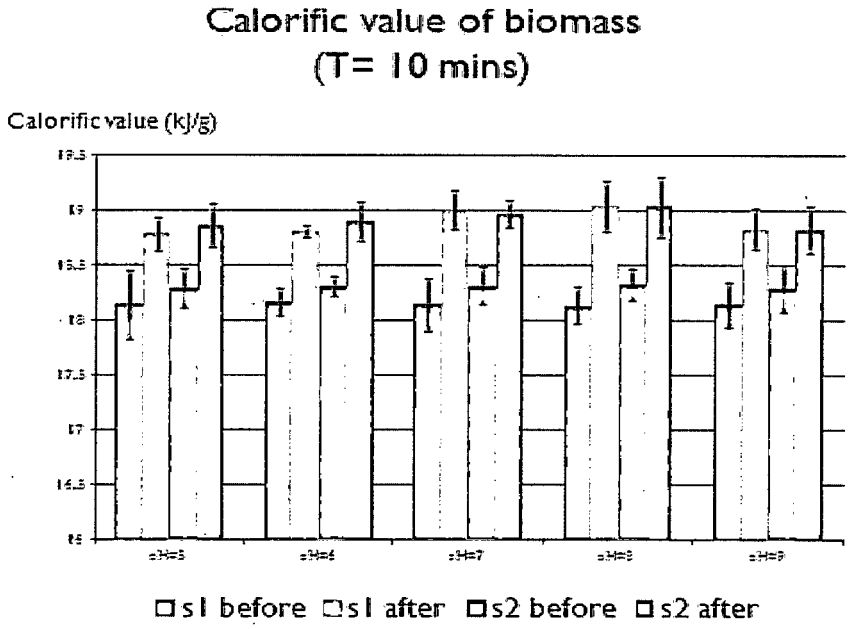

Calorific value of biomass
(T= 10 mins)
Calorific value (kJ/g)
s1 before
s1 after
s2 before
s2 after

Fig. 4

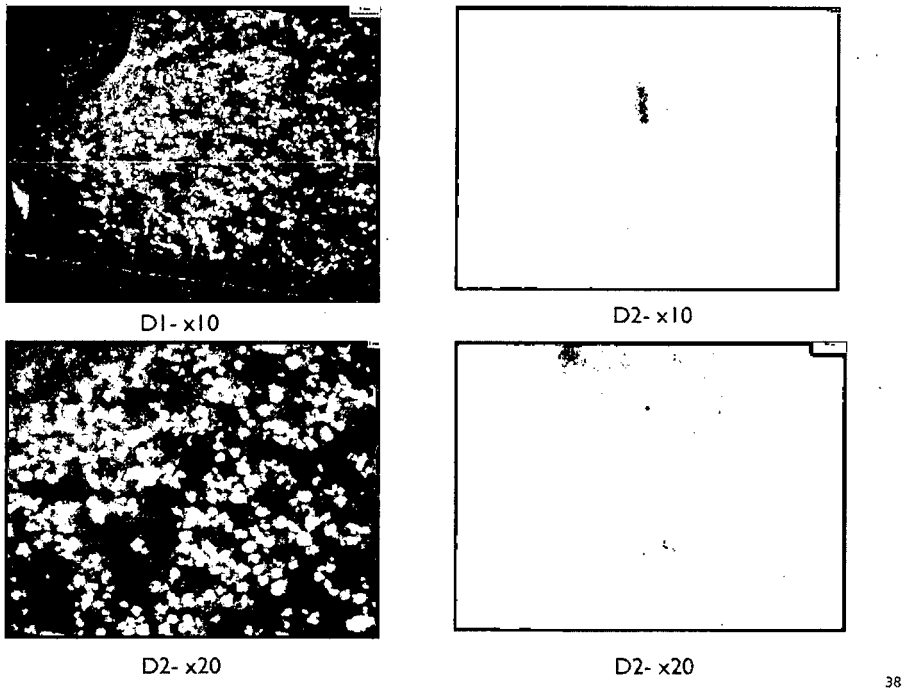

D1 - x10
D2- x10
D2- x20
D2- x20

Fig. 5

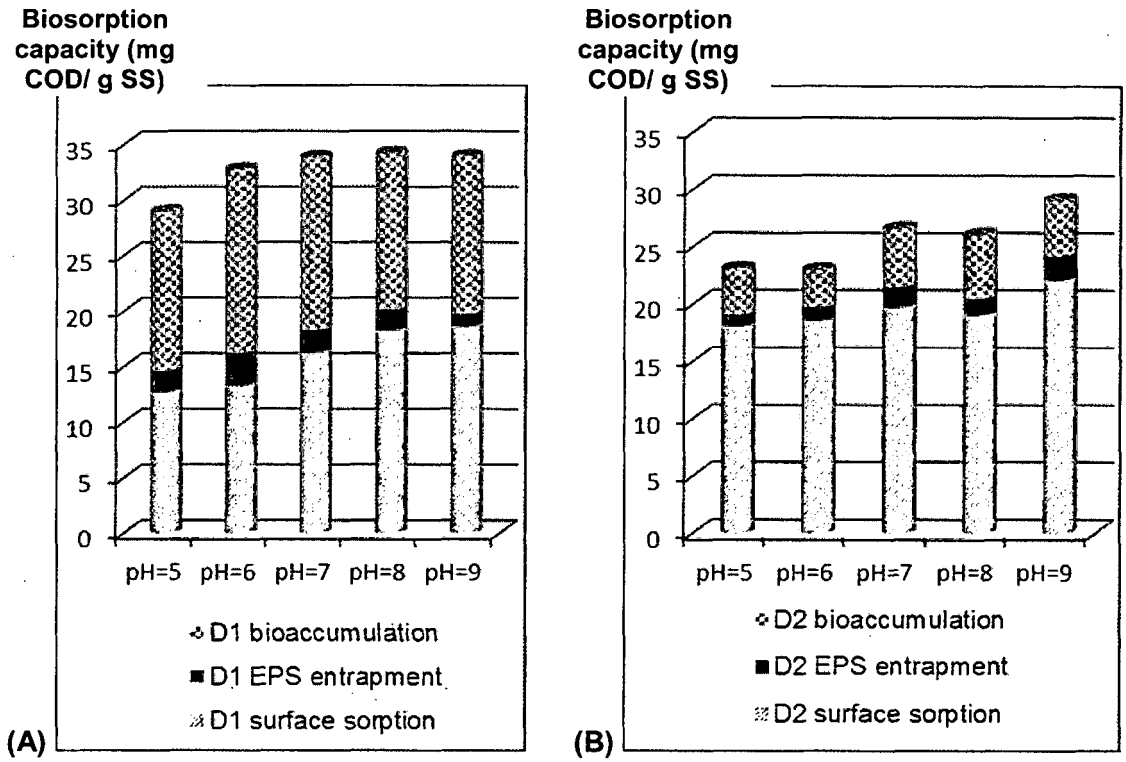

Biosorption capacity (mg COD/ g SS)
35
30
25
20
15
10
5
0
pH=5 pH=6 pH=7 pH=8 pH=9
D1 bioaccumulation
D1 EPS entrapment
D1 surface sorption
(A)
Biosorption capacity (mg COD/ g SS)
35
30
25
20
15
10
5
0
pH=5 pH=6 pH=7 pH=8 pH=9
D2 bioaccumulation
D2 EPS entrapment
D2 surface sorption
(B)

Fig. 6

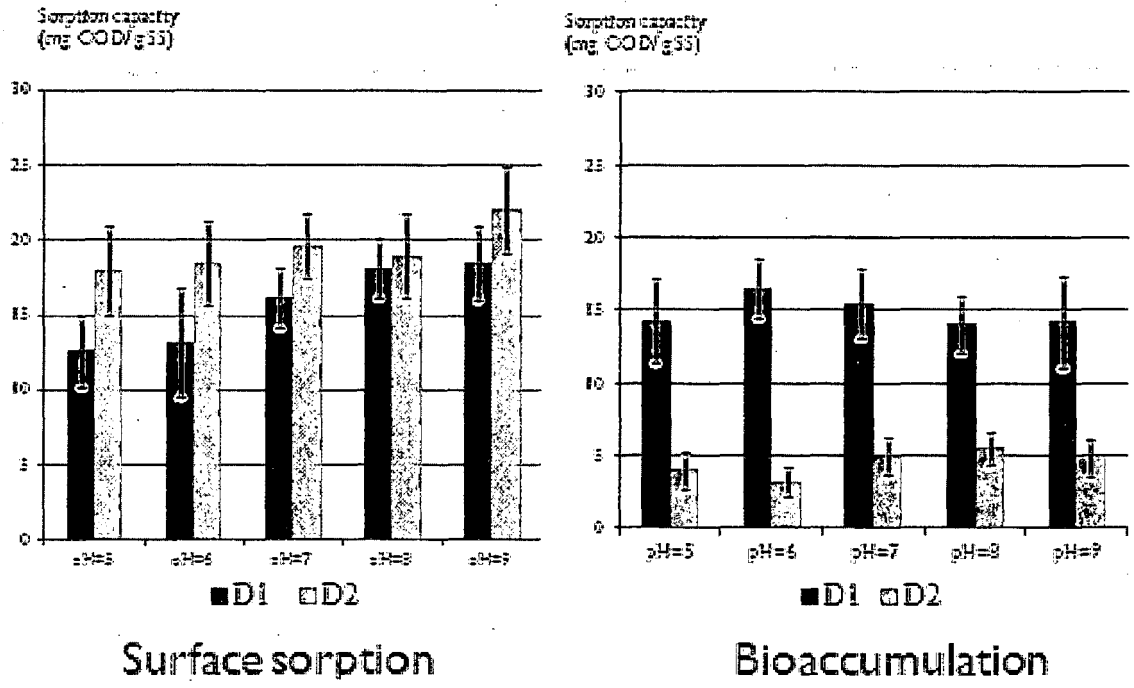

Sorption capacity (mg COD/gSS)
30
25
20
15
10
5
0
pH=5 pH=6 pH=7 pH=8 pH=9
D1 D2
Surface sorption
Sorption capacity (mg COD/gSS)
30
25
20
15
10
5
0
pH=5 pH=6 pH=7 pH=8 pH=9
D1 D2
Bioaccumulation

Fig. 7