

Appendix II supplementary data

Table II.A - Individual biovolumes of each phytoplankton specie considered in this work and it related geometric form

Organism	Biovolume ($\mu\text{m}^3/\text{cell}$)	Geometric shape
Chlorophyta		
<i>Bothriococcus</i>	48	prolate spheroid
<i>Carteria</i>	3155	sphere
<i>Closterium</i>	3265	2 cones
<i>Coelastrum</i>	789	sphere
<i>Cosmarium</i>	13598	prolated spheroid
<i>Mallomonas</i>	804	prolate spheroid
<i>Oocystis</i>	1969	Prolate spheroid
<i>Pediastrum</i>	40	Cylinder
<i>Planktosphaeria</i>	3733	Sphere
<i>Scenedesmus</i>	278	Prolate spheroid
<i>Schroederia</i>	398	2 cones
<i>Sphaerocystis</i>	1160	Sphere
<i>Staurastrum</i>	14484	2 truncated cones + 6 cylinders
Cryptophyta		
<i>Cryptomonas</i>	1987	prolate spheroid
<i>Croomonas</i>		prolate spheroid
Dynophyta		
<i>Ceratium</i>	78415	Ellipsoid + 2 cones + cylinder
<i>Peridinium</i>	678584	prolate spheroid
Cyanobacteria		
<i>Anabaena</i>	99	Sphere
<i>Microcystis</i>	36	Sphere
<i>Pseudoanabaena</i>	45	Sphere
Diatomea		
<i>Aulacoseira</i>	864	Cylinder
<i>Cocconeis</i>	729	Oval cylinder
<i>Cyclotella</i>	778	Cylinder
<i>Cymatopleura</i>	6098	Oval cylinder
<i>Cymbella</i>	410	Half parallelepiped
<i>Diatoma</i>	3582	Parallelepiped
<i>Fragillaria</i>	219	Half parallelepiped
<i>Gomphonema</i>	391	Half parallelepiped
<i>Gyrosigma</i>	3913	Parallelepiped
<i>Hantzschia</i>	1045	Cylinder
<i>Melosira</i>	3845	Cylinder
<i>Navicula</i>	260	Oval cylinder
<i>Nitzschia</i>	244	Cylinder
<i>Stephanodiscus</i>	5989	Cylinder