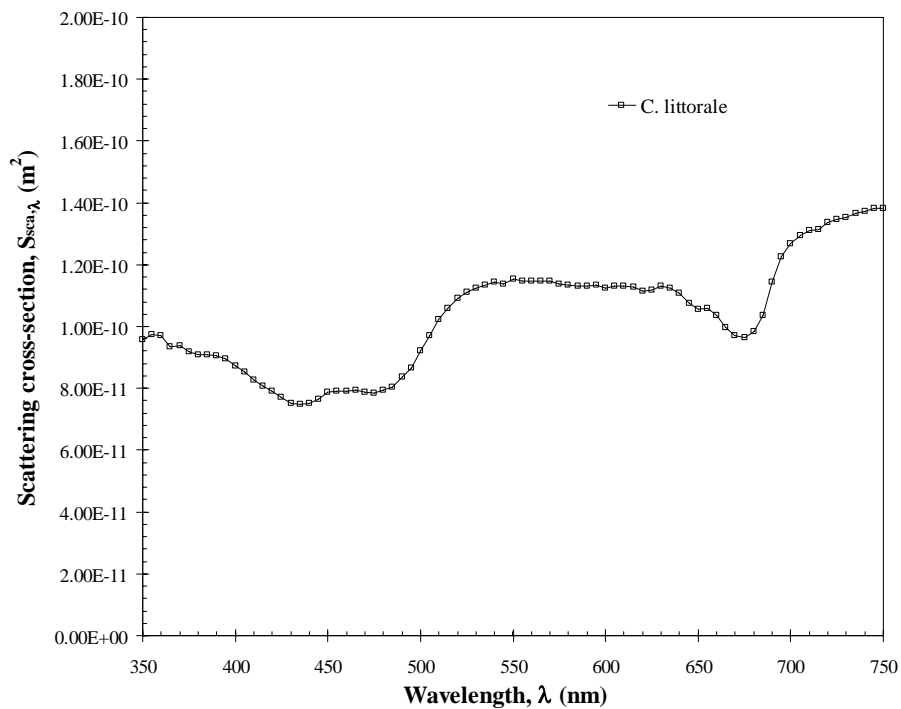
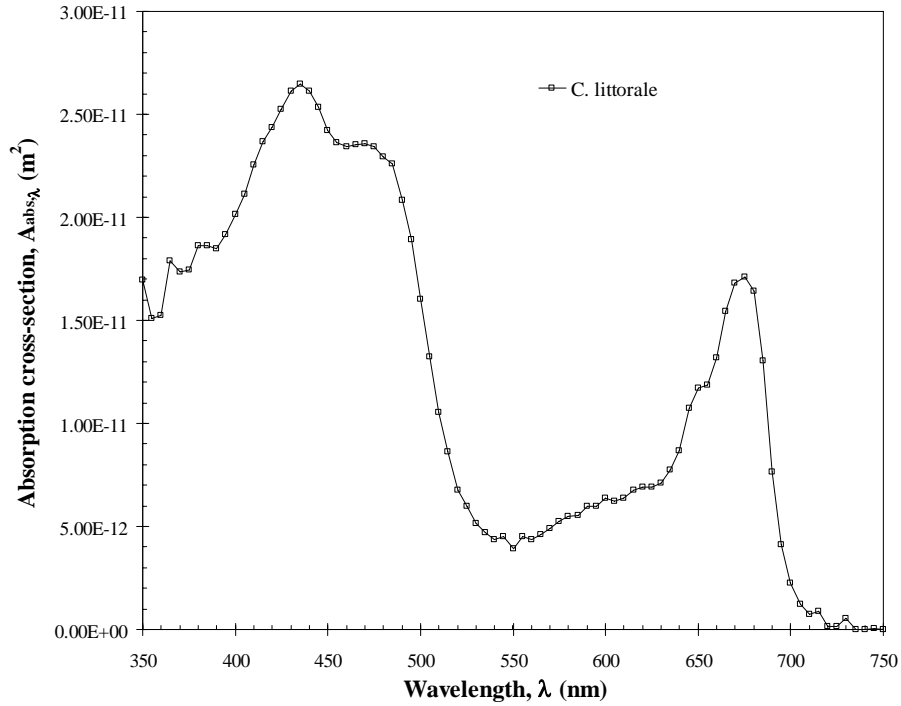
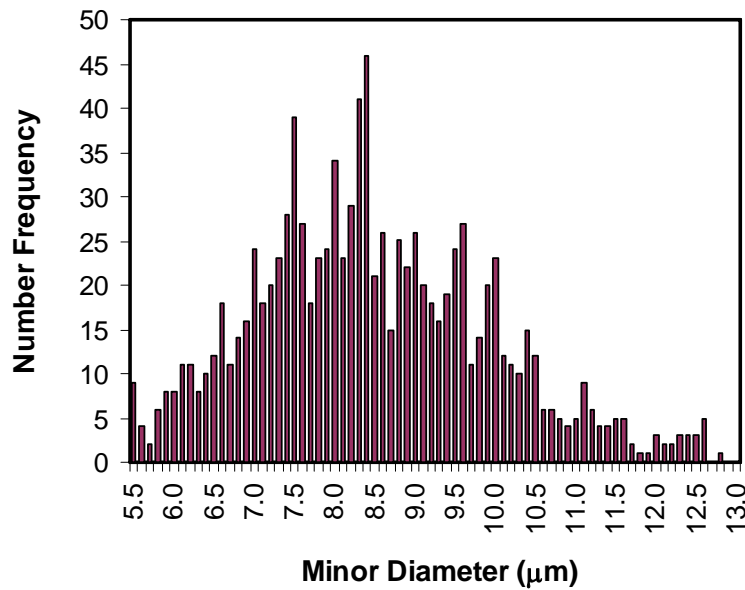
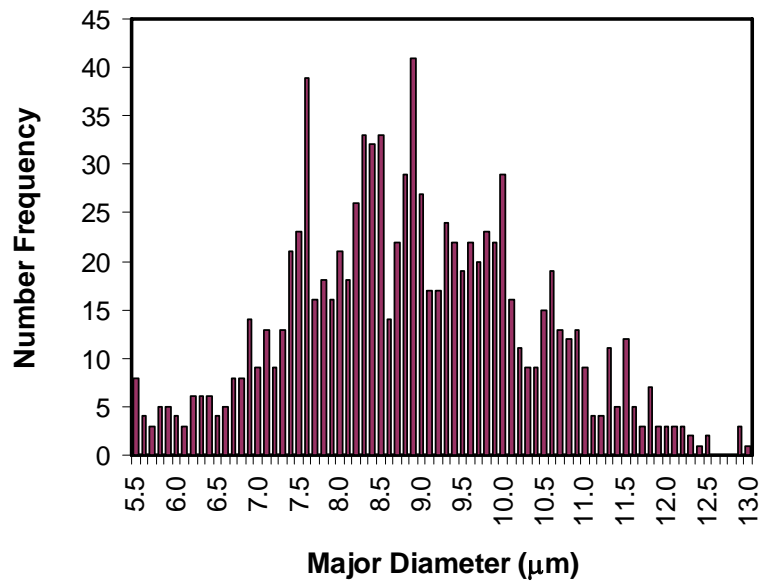


### Absorption and scattering coefficients of *Chlorococcum littorale*

Source: H. Berberoglu, Pedro S. Gomez and L. Pilon, *Radiation characteristics of Botryococcus braunii, Chlorococcum littorale and Chlorella sp. used for CO<sub>2</sub> fixation and biofuel production*, Journal of Quantitative Spectroscopy & Radiative Transfer, vol. 110, pp. 1879-1893, 2009. <http://dx.doi.org/10.1016/j.jqsrt.2009.04.005>





Summary for <i>Chlorococcum littorale</i>				
	Major Diameter ( $\mu\text{m}$ )	Minor Diameter ( $\mu\text{m}$ )	Circularity	Feret ( $\mu\text{m}$ )
Average	9.6	8.1	0.91	10.4
Stdev	3.9	2.3	0.12	4.0

Chlorophyll Concentrations			
Stats	Chl a (g/kg)	Chl b (g/kg)	Chl tot (g/kg)
Average	18.42 $\pm$ 0.43	50.08 $\pm$ 0.24	68.50 $\pm$ 0.26

$\lambda$ (nm)	$A_{\text{abs},\lambda}$ (m <sup>2</sup> )	$S_{\text{sca},\lambda}$ (m <sup>2</sup> )	$E_{\text{ext},\lambda}$ (m <sup>2</sup> )	albedo
350	1.70E-11	9.59E-11	1.13E-10	0.850
355	1.51E-11	9.74E-11	1.13E-10	0.866
360	1.53E-11	9.71E-11	1.12E-10	0.864
365	1.79E-11	9.35E-11	1.11E-10	0.839
370	1.73E-11	9.36E-11	1.11E-10	0.844
375	1.75E-11	9.19E-11	1.09E-10	0.840
380	1.86E-11	9.09E-11	1.10E-10	0.830
385	1.86E-11	9.08E-11	1.09E-10	0.830
390	1.85E-11	9.04E-11	1.09E-10	0.830
395	1.92E-11	8.94E-11	1.09E-10	0.823
400	2.01E-11	8.72E-11	1.07E-10	0.812
405	2.11E-11	8.51E-11	1.06E-10	0.801
410	2.26E-11	8.26E-11	1.05E-10	0.785
415	2.37E-11	8.07E-11	1.04E-10	0.773
420	2.44E-11	7.90E-11	1.03E-10	0.764
425	2.53E-11	7.71E-11	1.02E-10	0.753
430	2.61E-11	7.52E-11	1.01E-10	0.742
435	2.65E-11	7.48E-11	1.01E-10	0.738
440	2.61E-11	7.51E-11	1.01E-10	0.742
445	2.54E-11	7.65E-11	1.02E-10	0.751
450	2.42E-11	7.87E-11	1.03E-10	0.765
455	2.36E-11	7.90E-11	1.03E-10	0.770
460	2.34E-11	7.89E-11	1.02E-10	0.771
465	2.35E-11	7.93E-11	1.03E-10	0.771
470	2.36E-11	7.89E-11	1.02E-10	0.770
475	2.34E-11	7.86E-11	1.02E-10	0.770
480	2.29E-11	7.94E-11	1.02E-10	0.776
485	2.26E-11	8.06E-11	1.03E-10	0.781
490	2.09E-11	8.35E-11	1.04E-10	0.800
495	1.89E-11	8.67E-11	1.06E-10	0.821

$\lambda$ (nm)	$A_{\text{abs},\lambda}$ (m <sup>2</sup> )	$S_{\text{sca},\lambda}$ (m <sup>2</sup> )	$E_{\text{ext},\lambda}$ (m <sup>2</sup> )	albedo
500	1.60E-11	9.20E-11	1.08E-10	0.852
505	1.32E-11	9.71E-11	1.10E-10	0.880
510	1.06E-11	1.02E-10	1.13E-10	0.906
515	8.63E-12	1.06E-10	1.15E-10	0.925
520	6.74E-12	1.09E-10	1.16E-10	0.942
525	5.96E-12	1.11E-10	1.17E-10	0.949
530	5.13E-12	1.13E-10	1.18E-10	0.956
535	4.70E-12	1.13E-10	1.18E-10	0.960
540	4.38E-12	1.14E-10	1.19E-10	0.963
545	4.51E-12	1.14E-10	1.18E-10	0.962
550	3.91E-12	1.15E-10	1.19E-10	0.967
555	4.50E-12	1.15E-10	1.19E-10	0.962
560	4.37E-12	1.15E-10	1.19E-10	0.963
565	4.63E-12	1.15E-10	1.19E-10	0.961
570	4.90E-12	1.15E-10	1.20E-10	0.959
575	5.23E-12	1.14E-10	1.19E-10	0.956
580	5.48E-12	1.13E-10	1.19E-10	0.954
585	5.53E-12	1.13E-10	1.19E-10	0.953
590	5.97E-12	1.13E-10	1.19E-10	0.950
595	5.98E-12	1.13E-10	1.19E-10	0.950
600	6.39E-12	1.12E-10	1.19E-10	0.946
605	6.24E-12	1.13E-10	1.19E-10	0.948
610	6.35E-12	1.13E-10	1.19E-10	0.947
615	6.76E-12	1.13E-10	1.20E-10	0.943
620	6.90E-12	1.12E-10	1.18E-10	0.942
625	6.92E-12	1.12E-10	1.19E-10	0.942
630	7.09E-12	1.13E-10	1.20E-10	0.941
635	7.74E-12	1.12E-10	1.20E-10	0.936
640	8.66E-12	1.11E-10	1.20E-10	0.928
645	1.07E-11	1.08E-10	1.18E-10	0.909

$\lambda$ (nm)	$A_{\text{abs},\lambda}$ (m <sup>2</sup> )	$S_{\text{sca},\lambda}$ (m <sup>2</sup> )	$E_{\text{ext},\lambda}$ (m <sup>2</sup> )	albedo
650	1.17E-11	1.06E-10	1.17E-10	0.900
655	1.19E-11	1.06E-10	1.18E-10	0.899
660	1.32E-11	1.04E-10	1.17E-10	0.887
665	1.54E-11	9.96E-11	1.15E-10	0.866
670	1.68E-11	9.69E-11	1.14E-10	0.852
675	1.71E-11	9.66E-11	1.14E-10	0.849
680	1.64E-11	9.82E-11	1.15E-10	0.857
685	1.31E-11	1.04E-10	1.17E-10	0.888
690	7.66E-12	1.14E-10	1.22E-10	0.937
695	4.13E-12	1.22E-10	1.27E-10	0.967
700	2.25E-12	1.27E-10	1.29E-10	0.983
705	1.21E-12	1.29E-10	1.31E-10	0.991
710	7.43E-13	1.31E-10	1.32E-10	0.994
715	8.73E-13	1.31E-10	1.32E-10	0.993
720	1.71E-13	1.34E-10	1.34E-10	0.999
725	1.51E-13	1.35E-10	1.35E-10	0.999
730	5.55E-13	1.35E-10	1.36E-10	0.996
735	0.00	1.37E-10	1.36E-10	1.000
740	0.00	1.37E-10	1.37E-10	1.000
745	5.77E-14	1.38E-10	1.38E-10	1.000
750	0.00	1.38E-10	1.38E-10	1.000