

**Second IOCCG Summer Lecture Series**  
**21 July - 2 August 2014, Villefranche-sur-Mer, France**

<b>Date</b>	<b>Subject</b>	<b>Lecturers</b>
<b>Sunday 20 July 2014</b>	Participants arrive in Villefranche-sur-Mer	
<b>Monday 21 July 2014</b>		
09h00 - 09h10	Welcome address	LOV/OOV Directors
09h10 - 09h40	Overview of course content, logistical information, introduction to IOCCG	David Antoine
09h40 - 09h50	Personal introductions	
09h50 - 10h30	Brief student presentations (~5-7 min each) - (6 students)	Students
10h30 - 11h00	Coffee Break	
11h00 - 12h30	Brief student presentations (~5-7 min each) - (13 students)	Students
12h30 - 14h00	Lunch break	
14h00 - 14h30	Brief student presentations (~5-7 min each) - (4 students)	Students
14h30 - 15h30	The Science of Ocean Colour - a film by Roland Doerffer (46 min.)	
15h30 - 16h00	Coffee Break	
16h00 - 17h30	Inherent Optical Properties of ocean waters	Zhongping Lee
<b>Tuesday 22 July 2012</b>		
09h00 - 10h30	(1) Improved ocean ecosystem predictions through improved light calculations	Curtis Mobley
10h30 - 11h00	Coffee Break	
11h00 - 12h30	Inversion of Inherent Optical Properties from remote sensing	Zhongping Lee
12h30 - 14h00	Lunch break	
14h00 - 15h30	(2) Issues related to airborne hyperspectral remote sensing	Curtis Mobley
15h30 - 16h00	Coffee Break	
16h00 - 17h30	Ocean colour remote sensing in turbid coastal waters (1)	Kevin Ruddick
<b>Wednesday 23 July 2012</b>		
09h00 - 10h30	Atmospheric correction of ocean colour RS observations (1)	Menghua Wang
10h30 - 11h00	Coffee Break	
11h00 - 12h30	Phytoplankton variability and climate change (1)	Stephanie Henson
12h30 - 14h00	Lunch break	
14h00 - 15h30	(3) Spectrum-matching techniques for inversion of remote-sensing reflectance	Curtis Mobley
15h30 - 16h00	Coffee Break	
16h00 - 17h30	Ocean colour remote sensing in turbid coastal waters (2)	Kevin Ruddick
<b>Thursday 24 July 2012</b>		
09h00 - 10h30	Atmospheric correction of ocean colour RS observations (2)	Menghua Wang
10h30 - 11h00	Coffee Break	
11h00 - 12h30	IOP Applications	Zhongping Lee
12h30 - 14h00	Lunch break	
14h00 - 15h30	Phytoplankton variability and climate change (2)	Stephanie Henson
15h30 - 16h00	Coffee Break	
16h00 - 17h30	Group discussion session	Wang, Henson, Lee, Ruddick, Mobley, Lewis
<b>Friday 25 July 2012</b>		
09h00 - 10h30	Atmospheric correction of ocean colour RS observations (3)	Menghua Wang
10h30 - 11h00	Coffee Break	
11h00 - 12h30	In situ measurements (1)	Marlon Lewis
12h30 - 13h45	Lunch break	
13h45 - 15h45	Practical session using Giovanni (seasonal/interannual variability)	Stephanie Henson
15h45 - 16h00	Coffee Break	
16h00 - 17h30	(4) Introduction to HydroLight	Curtis Mobley
<b>Saturday 26 July 2012</b>		
09h00 - 10h30	In situ measurements (2)	Marlon Lewis
10h30 - 11h00	Coffee Break	
11h00 - 12h30	(5) Practical Session - HydroLight Lab 1	Curtis Mobley
12h30 - 14h00	Lunch break	
14h00 - 15h30	(6) Practical Session - HydroLight Lab 2	Curtis Mobley
15h30 -	FREE	
<b>Sunday 27 July 2012</b>		
FREE		

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<b>Date</b>	<b>Subject</b>	<b>Lecturers</b>
<b>Monday 28 July 2012</b>		
09h00 - 10h30	Bio-optical modeling of Inherent Optical Properties (including PFT approaches)	Collin Roesler
10h30 - 11h00	Coffee Break	
11h00 - 12h30	Errors and uncertainties in ocean colour remote sensing (1)	Roland Doerffer
12h30 - 14h00	Lunch break	
14h00 - 15h30	Linkages between IOPs and biogeochemistry	Emmanuel Boss
15h30 - 16h00	Coffee Break	
16h00 - 17h30	Errors and uncertainties in ocean colour remote sensing (2)	Roland Doerffer
<b>Tuesday 29 July 2012</b>		
09h00 - 10h30	Practical: Errors and uncertainties in ocean colour remote sensing	Roland Doerffer
10h30 - 11h00	Coffee Break	
11h00 - 12h30	Practical contd: Errors and uncertainties in ocean colour remote sensing	Roland Doerffer
12h30 - 14h00	Lunch break	
14h00 - 15h30	Practical: Playing with light: (absorption scattering, fluorescence and polarization)	Emmanuel Boss/Collin Roesler
15h30 - 16h00	Coffee Break	
16h00 - 17h30	Group discussion Session	Roesler, Doerffer, Boss, Stramski, Mobley
<b>Wednesday 30 July 2012</b>		
09h00 - 10h30	Practical: Matlab code for semi-analytic inversion (non-linear and linear matrix inversion)	Collin Roesler
10h30 - 11h00	Coffee Break	
11h00 - 12h30	Optics of marine particles (1)	Dariusz Stramski
12h30 - 14h00	Lunch break	
14h00 - 15h30	Practical: AC-lab: measuring dissolved and particulate absorption.	Emmanuel Boss/Collin Roesler
15h30 - 16h00	Coffee Break	
16h00 - 17h30	Practical: AC-lab: measuring dissolved and particulate absorption.	Emmanuel Boss/Collin Roesler
<b>Thursday 31 July 2012</b>		
09h00 - 10h30	Dynamics of open ocean CDOM	Dave Siegel
10h30 - 11h00	Coffee Break	
11h00 - 12h30	Optics of marine particles (2)	Dariusz Stramski
12h30 - 14h00	Lunch break	
14h00 - 15h30	Practical: Scattering/back-scattering theory & measurement.	Emmanuel Boss/Collin Roesler
15h30 - 16h00	Coffee Break	
16h00 - 17h30	Practical: Scattering/back-scattering theory & measurement.	Emmanuel Boss/Collin Roesler
<b>Friday 1 August 2012</b>		
09h00 - 10h30	Alternative interpretations of regional and global trends in ocean colour observations	Dave Siegel
10h30 - 11h00	Coffee Break	
11h00 - 12h30	Practical: Validation of satellite ocean colour data	Mati Kahru
12h30 - 14h00	Lunch break	
14h00 - 15h30	Bio-optical modeling of single and multichannel fluorescence	Collin Roesler
15h30 - 16h00	Coffee Break	
16h00 - 17h30	Group discussion session	Siegel, Stramski, Mobley, Kahru, Roesler
<b>Saturday 2 August 2012</b>		
09h00 - 10h30	Constraining the global carbon cycle from satellite observation	Dave Siegel
10h30 - 11h00	Coffee Break	
11h00 - 12h30	Practical: Detecting change in satellite time series.	Mati Kahru
12h30 - 14h00	Lunch break	
14h00 - 15h30	Practical: Detecting change in satellite time series.	Mati Kahru
15h30 - 16h00	Coffee Break	
16h00 - 17h30	Discussion session and conclusion of 2014 Summer Lecture Series	All

CLOSURE - 2nd SUMMER LECTURE SERIES