

## Oral Session 1

Auditorium I

- 08:45 – 09:15 IOCCG welcome - **Cara Wilson**, KIOST welcome, IOCCG Overview - **Stewart Bernard**  
 09:15 – 10:00 **Keynote 1:** Looking back GOCI experience towards the upcoming GOCI-II period and beyond. **Young-Je Park** (KIOST)

## 10:00 – 10:30 Coffee Break

### Emerging Applications and Science in SE Asia

Session Chair: **Marlon Lewis**

- 10:30 – 10:45 Ocean Colour activities in India. **Prakash Chauhan** (ISRO, India) (pre-recorded)  
 10:45 – 11:00 Emerging applications and science from GCOM-C. **Hiroshi Murakami** (JAXA, Japan)  
 11:00 – 11:15 Introduction of HY-1C satellite mission and ocean colour products. **Zhihau Mao** (SOA, China)  
 11:15 – 11:30 KIOST agency report. **Joo-Hyung Ryu** (KIOST, South Korea)  
 11:30 – 12:15 **Keynote 2:** Rising green tides and golden tides: An oceanographic regime shift? **Chuanmin Hu** (U. South Florida)

## 12:15 – 14:00 Lunch Break

## 14:00 – 16:30 Breakout Workshops 1, 2 & 3

Breakout Workshop 1 Auditorium 2		Breakout Workshop 2 Auditorium I		Breakout Workshop 3 Auditorium 3	
<b>Open source scientific computing tools &amp; resources</b> Joaquín Chaves, Erdem Karaköylü, Joel P. Scott		<b>Requirements for phytoplankton characterisation</b> Astrid Bracher, Ryan Vandermeulen, Stewart Bernard		<b>High temporal/spatial res. applications</b> Joe Salisbury, Kevin Turpie, Maria Tzortziou, Arnold Dekker, Wonkook Kim, A. Mannino	
14:00 -14:05	Introduction. <b>Joaquin Chaves</b> (NASA)	14:00-14:05	Introduction. <b>Astrid Bracher</b> (AWI)	14:00-14:10	Overview. <b>Antonio Mannino</b> (NASA), <b>Wonkook Kim</b> (KIOST)
14:05 -14:25	Python for multi-year GOCI. <b>M-S Park</b> (KIOST)	14:05-14:25	Overview. <b>C. Mouw</b> , Q&A and discussion. <b>R. Vandermeulen</b>	14:00-14:50	Questions <b>J. Salisbury, M. Tzortziou, C. Hu, Z-P. Lee</b>
14:25 -14:30	QA / discussion.	14:25-15:15	Detection of specific blooms. <b>A. Dekker, S. Shang, W. Kim, A. Dogliotti, T. Kutser, T. Kostadinov.</b> Discussion	<b>High-Spatial Resolution Capabilities</b>	
14:30 -14:50	Python & Jupyter Notebook. <b>Joel Scott</b>	15:15-15:30	Role of synthetic data sets. <b>H. Xi</b> and <b>J. Wei.</b> Discussion	14:50-15:00	Overview. <b>Arnold Dekker</b>
14:50 -14:55	QA / discussion.	15:30-16:15	Initiatives for PFT Validation. <b>L. Clementson, Vandermeulen, S. Shang</b> and <b>A. Bracher.</b>	15:00-15:40	Questions. <b>M. Tzortziou, N. Pahlevan, J. Ortiz, C. Hu, Z-P. Lee, E.Hochberg</b>
14:55-15:00	Coffee break	15:30-16:15	Discussion on gaps. Chair: <b>Stewart Bernard</b>	<b>Combined High-Spatial/Temp.Res. Capabilities</b>	
15:00 -15:25	SeaDAS. <b>Bruce Monger</b>	16:15-16:30	Summary/ recommendations. Chair: <b>Ryan Vandermeulen</b>	15:40-15:50	Overview. <b>Maria Tzortziou</b>
15:25 -15:45	Open science principles. <b>Hayley Evers-King</b> (PML)			15:50-16:30	Questions <b>A. Dekker, N. Pahlevan, J.Ortiz, C. Hu, Z-P. Lee, E.Hochberg, J. Salisbury, W. Kim, Antonio Mannino</b>
15:45 -15:50	QA / discussion.				
15:50 -16:10	Workflow in Python. <b>Erdem Karaköylü</b> (NASA)				
16:10 -16:15	QA / discussion.				
16:15 -16:30	Summary/discussion				

## 16:30 – 17:30 Poster Session 1

Lightning presentations in Auditorium I (# 1 - 65)

## 18:00- 20:00 Icebreaker sponsored by KIOST and Airbus (Terrace Hall, 6th Floor)

Airbus sponsor presentation: **GOCI-II development (Pierre Coste)**

## Oral Session 2

Auditorium I

- 08:45 – 09:00 Status of SABIA-Mar mission and ocean applications of CONAE. **Sandra Torrusio** (Argentina) (pre-recorded)  
 09:00 – 09:15 Canada's Ocean Color Activity Report. **Laurent Giugni** (CSA, Canada) (pre-recorded)

## Poster Session 2

09:15 - 10:15 Lightning presentations in Auditorium I (#66 - 132)  
 Followed by poster session (coffee available)

Session Chair: **Bronwyn Cahill**

- 11:00 – 11:45 **Keynote 3:** Do small scales make a big difference? Building a South African Southern Ocean Carbon - Climate research capability (the journey, direction and science highlights). **Sandy Thomalla** (CSIR, South Africa)  
 11:45 – 12:15 Reports from Breakout workshops 1, 2, 3

## Lunch Break

## Breakout Workshops 4, 5 & 6

Breakout Workshop 4 Auditorium I		Breakout Workshop 5 Auditorium 3		Breakout Workshop 6 Auditorium 2	
<b>Remote sensing optically-complex and shallow waters</b> ZhongPing Lee (UMB), Dirk Aurin (NASA Langley)		<b>Vicarious calibration and validation protocols</b> Giuseppe Zibordi, Kenneth Voss and B. Carol Johnson		<b>Research to operations applications</b> Veronica Lance (NOAA) and Ewa Kwiatkowska (EUMETSAT)	
14:00-14:05	Welcome remarks. <b>ZhongPing Lee</b> (UMB)	14:00 -14:15	Ocean color validation protocols. <b>Giuseppe Zibordi</b> (JRC, EU)	14:00-14:10	Overview. <b>Veronica Lance</b> (NOAA), <b>Ewa Kwiatkowska</b> (EUMETSAT)
14:05-14:25	RS of optically-complex waters. <b>Colleen Mouw</b>	14:15 -15:00	Group discussion	14:10-14:20	Discussion: identification of relevant 2013 recommendations
14:25-14:45	Arctic DOM. <b>A. Mannino</b>	<i>Coffee available (no break)</i>		14:20-14:30	RS for fisheries research. <b>D. Lee</b>
14:45-14:55	Detecting floating algae. <b>Chuanmin Hu</b>	15:00-15:15	System vicarious calibration protocols. <b>Kenneth Voss</b> (U. Miami)	14:30-14:40	NOAA Fisheries Management. Cara Wilson (NOAA)
14:55-15:05	RS of Oil spills. <b>Y. Lu</b>	15:15-16:00	Group discussion	14:40-14:50	OCIMS. <b>Stewart Bernard</b> (CSIR)
15:05-15:15	CALIPSO, lessons learned. <b>Yongxiang Hu</b>	16:00-16:30	Wrap up and consolidation	14:50-15:00	Mario Castro de Lera (Deep Blue Globe UG), Pablo Ruiz Sánchez (ESA)
15:15-15:25	Multi-wavelength ocean lidar. <b>Deric Gray</b> (NRL)			15:00-15:20	User training. <b>Hayley Evers-King</b>
15:25-15:35	Hyperspectral. <b>R. Garcia</b>			15:30-15:50	Discussion
15:35-15:45	Coral reefs. <b>E. Hochberg</b>			15:50-16:00	Data services. <b>Gianluca Volpei</b>
15:45-16:20	Group discussion			16:00-16:20	Discussion
16:20-16:30	Wrap-up. <b>Dirk Aurin</b>			16:20-16:30	Key points, synthesis and actions <b>V. Lance, Ewa Kwiatkowska</b>

Session Chair: **Ana Dogliotti**

## Oral Session 3

- 16:30 – 17:15 **Keynote 4:** HABs, ocean color remote sensing, bio-optical monitoring in fjords and aquaculture activities. **Alejandro Clement** (Plancton Andino, Chile)

## Oral Session 4

Session Chair: Lesley Clementson

08:45 - 09:30 **Keynote 5: How can imaging flow cytometry serve ocean color science?** **Jianping Li** (Shenzhen Institutes of Advanced Technology, China)

09:30 – 12:15 **Breakout Workshops 7, 8 & 9**

Breakout Workshop 7 Auditorium 1		Breakout Workshop 8 Auditorium 2		Breakout Workshop 9 Auditorium 3	
<b>Emerging new technologies for ocean colour research.</b> Mike Twardowski, Griet Neukermans		<b>Ocean colour satellite sensor calibration.</b> Gerhard Meister (NASA)		<b>Atmospheric correction under complex/extreme environments.</b> Constant Mazeran, Amir Ibrahim and Robert Frouin	
09:30 - 09:35	Introduction to session. <b>Mike Twardowski</b> (HBOI-FAU)	09:30-09:35	Introduction. <b>G. Meister</b> (NASA)	09:30-09:35	Introduction and goal of the WS.
09:35 - 09:50	Radiometric validation: HYPERNETS. <b>K. Ruddick</b>	09:35-09:50	Ocean Color Instrument on PACE. <b>Gerhard Meister</b> (NASA)	09:35-09:45	IOCGG WG on Atm. Corr. Algorithms. <b>Cédric Jamet</b> (ULCO)
09:50 - 10:00	Radiometric cal/val: HYPERNAV. <b>A. Barnard</b>	09:50-10:05	JPSS-2 VIIRS pre-launch cal. <b>Jack Xiong</b> (NASA GSFC)	09:45-09:55	EUMETSAT Bright Pixel Correction. <b>C. Mazeran</b> (SOLVO)
10:00 - 10:10	Cal/val ProVal float. <b>Griet Neukermans</b> (LOV)	10:05-10:20	OLCI-B straylight correction. <b>Ludovic Bourg</b> (ACRI-ST, ESA)	09:55 – 10:05	ACIX I and ACIX II for atmospheric correction. <b>Nima Pahlevan</b> (NASA)
10:10 - 10:40	Discussion: Radiometric cal/val advances	10:20-10:35	Estimating straylight impact. <b>Shihyan Lee</b> (NASA)	10:05 – 10:30	Group discussion: robust strategy for AC over optically-complex waters.
10:40 - 10:50	Backscattering sensor. <b>Wayne Slade</b>	10:35-10:50	Cal. of GOCI/test results of GOCI-II. <b>S. Cho/K. Ahn</b> (KIOST)	10:30 - 10:40	Physics and RS of absorbing aerosol. <b>Robert Frouin</b> (UCSD)
10:50 - 11:20	Group Discussion: IOPs	10:50-11:05	NOAA VIIRS calibrations. <b>Menghua Wang</b> (NOAA)	10:40 - 10:50	NO <sub>2</sub> correction over coastal waters. <b>Maria Tzortziou</b> (CCNY)
1120 - 11:35	Imaging system for high altitude platforms <b>Mike Twardowski</b> (HBOI-FAU)	11:05-11:15	<i>Coffee break</i>	10:50 – 11:20	Group discussion: how to detect and correct for absorbing aerosols?
11:35 - 12:05	Group discussion: new potential platforms.	11:15-11:30	Calibration of SGLI on-orbit. <b>Hiroshi Murakami</b> (JAXA)	11:20 – 11:30	IOCCG WG on Uncertainties. <b>Frederic Melin</b> (EU JRC)
12:05 - 12:15	Summary/preparation key messages.	11:30-11:45	On-orbit performance of HY-1C/COCTS. <b>Xianqiang He</b> (SIO)	11:30 – 11:55	Group discussion: how to derive uncertainties in the AC?
		11:45-12:00	OLCI diffuser characterization. <b>Ewa Kwiatkowska</b> (EUMETSAT)	11:55 – 12:15	Ideas for AC in complex environments. Key agency message .
		12:00-12:15	OLCI-A and OLCI-B cross-cal. <b>Ludovic Bourg</b> (ACRI-ST, ESA)		

12:10 – 14:00 **Lunch Break**

Session Chair: Laura Lorenzoni

## Oral Session 5

14:00 - 14:20 NOAA emerging applications and science. **Menghua Wang**  
 14:20 - 14:40 EUMETSAT emerging applications and science. **Ewa Kwiatkowska**  
 14:45 - 15:30 **Keynote 6: Ocean Colour Remote Sensing in Polar Seas.** **Atsushi Matsuoka**  
 15:30 - 16:00 Reports from breakout workshops 4, 5 and 6

16:00 – 17:30 **Poster Session 3**

## Oral Session 6

Session Chair: Tim Moore

- 08:45 - 09:30 **Keynote 7:** Coccolithophores: optical properties and biogeochemistry. **Griet Neukermans**  
09:30 - 09:50 NASA emerging applications and science. **Paula Bontempi**  
09:50 - 10:10 Emerging applications and science from ESA. **Marie-Hélène Rio**
- 

## 10:15 - 11:45 **Poster Session 4**

---

- 11:45 - 12:15 Reports from breakout workshops 7, 8 and 9
- 

## 12:15 - 14:00 **Lunch Break**

---

## Oral Session 7

Auditorium I

- 14:00 - 14:45 **Keynote 8:** The evolution of ocean radiative transfer modeling **Curtis Mobley**  
14:45 - 16:20 Q & A Community/Agency Town Hall (all Agency Representatives)
- 

## 16:20 - 16:30 **Closing Remarks** (Cara Wilson)

---