

# IMOS National Working Group on Bio-optical Instrumentation and Observing

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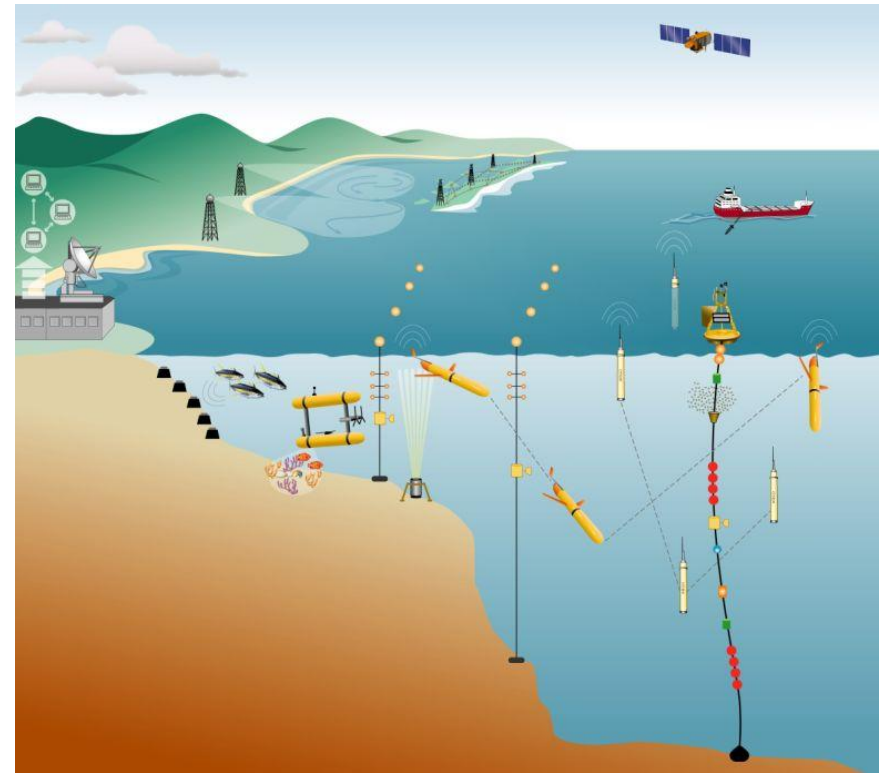
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# Background and rationale

- Discussions following IMOS session at AMSA
- Bio-optical instrumentation a key component to many IMOS facilities
- Issues:
  - Calibration, validation and interpretation
  - Best use of instruments and data in a national program across multiple facilities and for multiple users requires nationally coordinated efforts
- Formation of Working Group (WG) with broad mandate of tackling issues of national relevance related to bio-optical measurements and interpretation
- All documentation available on IMOS wiki

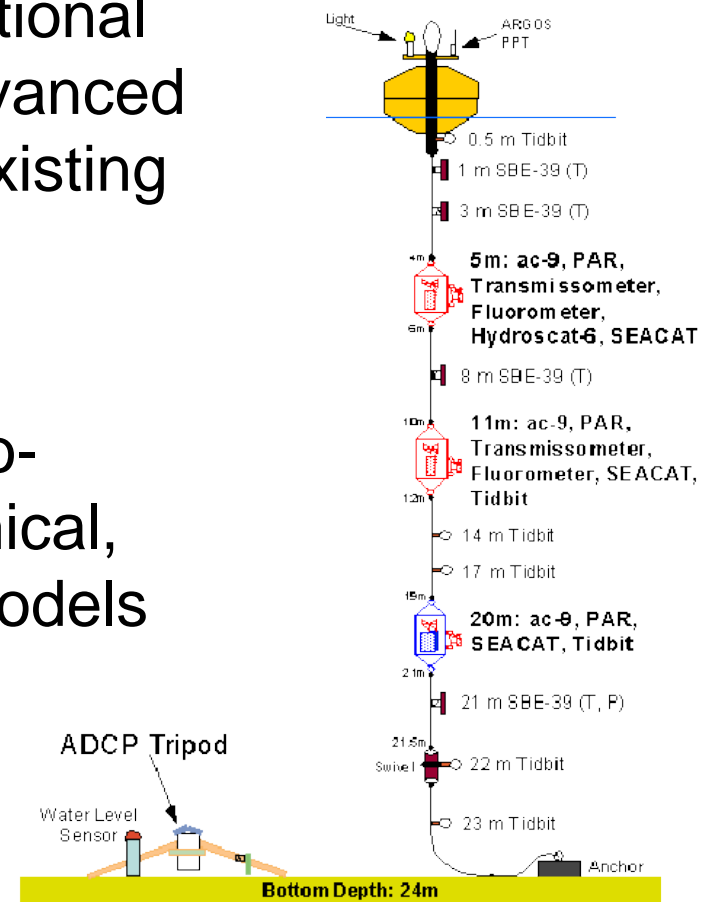
# Proposed Terms of Reference (ToR)

1. Develop an integrated and scientifically robust strategy for the calibration, validation and interpretation of single-wavelength fluorescence and scattering data, as currently collected by a number of IMOS facilities



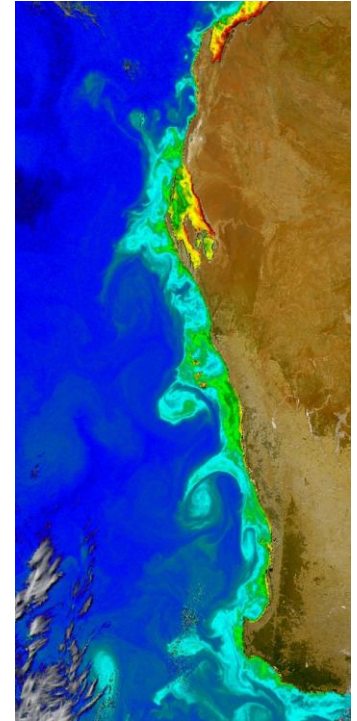
# Proposed Terms of Reference (ToR)

2. Develop a consensus regarding national priorities for incorporating more advanced bio-optical instrumentation within existing IMOS facilities
3. Facilitate and improve links from bio-optical data streams to biogeochemical, ocean circulation and ecosystem models



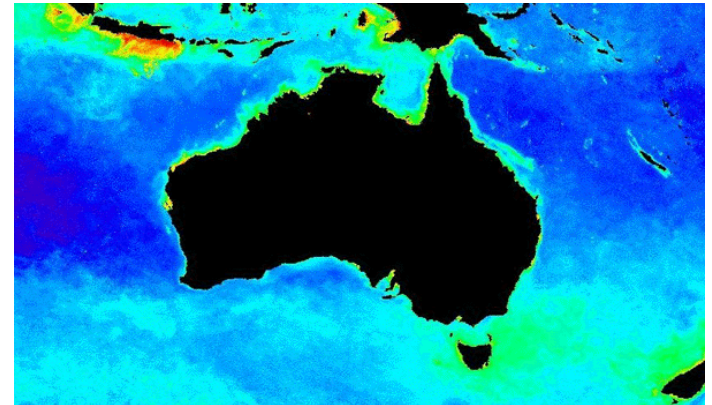
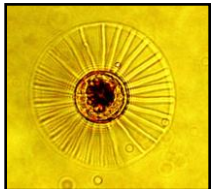
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4. Advance integration of *in situ* bio-optical observations and satellite remote sensing, including strategies for the development of inter-calibration protocols and exercises
5. Facilitate capacity building and knowledge transfer to data users in the form of:
  - workshops,
  - research symposia
  - training programs
  - competitive grant proposals
  - linkages with international programs
  - peer-reviewed publications and technical papers



# Required expertise to address ToR

- Phytoplankton ecology and physiology
- Bio-optical measurements and interpretation
- Calibration of optical instruments
- Biogeochemical and ocean circulation modelling
- Inherent optical properties of seawater
- Remote sensing of coastal and oceanic waters



# WG composition

- Roughly following SCOR WG model
  - ~ 10 Regular members (we have 13)
    - Firm commitment to contribute on-going time and effort to WG operations and outcomes
  - Associate members and observers – no limit
- Regular members chosen for their expertise to meet the proposed ToR
  - Act as representatives for their field(s)
    - Simon Allen (IMOS), Mark Baird (UNSW), Lesley Clementson (CMAR), Paul Daniel (CLW), Arnold Dekker (CLW), Martina Doblin (UTS), Peter Fearn (CUT), Christine Hanson (UWA), John Parslow (CMAR), Peter Ralph (UTS), Peter Strutton (UTas), Peter Thompson (CMAR), Scarla Weeks (UQ)
- First step towards IMOS Bio-optical Community of Practice

# Funding

- IMOS has funded WG operations (~ \$60 K) for 2.5 years (2010 to mid-2012)
- Covers travel/accommodation/meeting expenses for 12 members over 6 meetings, with additional funds for Associate Member travel
- Limit costs and increase opportunities for greater participation basing WG meetings around other 'meetings of opportunity'

# Mode of operation

- Series of 6 meetings – tentative dates:
  - March 2010 – Hobart; regular members
    - Focus = determine ToR and WG outcomes, task prioritisation and planning
  - July 2010 – Wollongong (post-AMSA); all welcome
    - Focus = TBA
  - Late 2010/early 2011 – location TBA
  - Mid 2011 = Perth (post-AMSA)
  - Late 2011/early 2012 – location TBA
  - Mid 2012 – Launceston (post-AMSA)
- Plus workshops, symposia, training programs etc.

# Interested in being involved and/or informed?

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