

# Trends, Reflections, Evolution, and Visions in Ocean Research (TREVOR) Symposium and Training Course 2023 7-11 AUGUST 2023 Plymouth Marine Laboratory, Plymouth, UK



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The Trends, Reflections, Evolution, and Visions in Ocean Research (TREVOR) Symposium was organised in conjunction with a multi-faceted training course. The details of the symposium are provided in Section 1 of the report, followed by the details of the training course in Section 2.

## **I. SYMPOSIUM**

### **1.1 BACKGROUND**

The idea of conducting an international symposium in honour of Trevor Platt's scientific achievements was put forth by Prof. Osvaldo Ulloa, TPSF member, and was presented to the members at the TPSF annual meeting on 12 August 2022 by Dr. Shubha Platt. All members supported it. A series of discussions followed, and Plymouth Marine Laboratory (PML), UK, offered to host the event. It was subsequently decided that the symposium be preceded by a training programme for early career researchers on recent advances in satellite remote sensing and possibly other subject areas, in honour of Prof. Platt's long-term commitment to capacity building. Many other like-minded organisations, with some of which Trevor Platt had had close associations, were approached for support, and on receiving warm and positive responses, the decision was made to take the initiative forward as a joint, collaborative effort.

### **1.2 OBJECTIVES**

- To provide a forum for exchange of scientific ideas and findings among TPSF members and the broader scientific community on the many scientific research areas on which Trevor Platt left his imprint.
- To carry forward Trevor's legacy in aquatic research and international collaboration.
- To promote capacity building and education in ocean sciences.
- To establish international scientific networks to promote collaborative research in aquatic sciences.

### **1.3 ORGANISING AND PLANNING COMMITTEE**

The committee included former students and colleagues of Trevor Platt, and representatives of co-sponsors. The organisation and planning of the symposium and the associated training activities was very much an inter-organisational collaborative effort.

Anas Abdulaziz (NIO, India)

Arvind Singh (PRL, India)

Bob Brewin (University of Exeter, UK)

Frédéric Mélin (JRC, Ispra, Italy)

Gemma Kulk (PML, UK)

Grinson George (CMFRI, India)

Heather Bouman (Oxford University, UK)

Jasmin C. (TPSF, India)

Lilian Krug (POGO, Portugal)

Margaret Kyewalyanga (IMS, Zanzibar)

Milton Kampel (INPE, Brazil)  
Nandini Menon (NERCI, India)  
Nicolas Hoepffner (France)  
Raisha Lovindeer (IOCCG, Canada)  
Renato Quiñones (UdeC, Chile)  
Samy Djavinia (EMSA, Portugal)  
Sanjiba Kumar Baliarsingh (INCOIS, India)  
SeungHyun Son (NOAA, USA)  
Shubha Sathyendranath (PML, UK)  
Sophie Seeyave (POGO, UK)  
Thomas Jackson (PML, UK)  
Venetia Stuart (IOCCG, Canada)  
Vivian Lutz (INIDEP, Argentina)



*Figure 1: (L) Organising committee of the symposium at pre-symposium dinner; and (R) Organising committee at the symposium*

A subcommittee oversaw the training aspects:

Thomas Jackson (Leader)  
Gemma Kulk  
Hayley Evers King  
Benjamin Loveday  
Lauren Biermann  
Sanjiba Kumar Baliarsingh  
SeungHyun Son  
Shubha Sathyendranath

The committee met weekly from October 2022 to July 2023, to plan and monitor the preparations for the symposium.

Registration fee for different categories (students, and participants from developing and developed countries) was fixed and deadlines for each activity were decided.

Important dates for the various activities were as follows:

**Table 1: Deadlines and dates of announcements of symposium events**

Date	Event
12 February, 2023	Extended deadline for Symposium abstract submission and training course applications
15 February, 2023	Notifications of oral/poster presentations begin
15 March, 2023	Announcement of selected candidates for in-person training & travel scholarships
April – July, 2023	Online training course
30 April, 2023	Deadline for Symposium early bird registration
30 June, 2023	Deadline for Symposium registration
7 – 8 August, 2023	In-person training course
9 – 11 August, 2023	Trevor Platt Science Symposium
11 August, 2023	Annual General Meeting of Trevor Platt Science Foundation (14:00h onwards)

#### 1.4 SPONSORING AGENCIES

Other international organisations and funding agencies with shared interests were approached for financial support and co-sponsorship. Practically all the organisations that were approached responded positively. A total of 73 participants (including 27 trainees) were supported by the different sponsors (Table2)

**Table 2: Sponsoring agencies and details of sponsorship**

Sponsoring Agency	Details of sponsorship	Number of participants sponsored
NF-POGO Alumni Network for the Ocean (NANO), UK	Registration, travel and subsistence funds to NANO members who are part of NANO-DOAP project to attend symposium	18 participants
European Space Agency (ESA) Italy through WIDGEON and BICEP projects (Technical Officers Stefano Ferretti and Marie-Helene Rio)	Registration, travel and subsistence funds to students to attend training and symposium through the capacity building and outreach components of their projects WIDGEON and BICEP	18 (14 trainees)

Partnership for Observation of the Global Ocean (POGO), UK	Registration, travel and subsistence funds for early career researchers to attend training and/or symposium	9 (3 trainees)
Platt Science Fund, PML, UK	Registration, travel and subsistence funds for lead speakers to attend symposium	6 participants
EUMETSAT, Europe and Copernicus, EU	Registration, travel and subsistence funds to 5 trainees and 2 trainers for the in-person training.	7 (5 trainees and 2 trainers)
International Ocean Colour Coordinating Group (IOCCG), Canada	Registration, travel and subsistence funds to selected students to attend training and symposium. Also sponsored the expenses of 2 organising committee members	5 (3 trainees)
Open Network for Water Related Diseases (ONWARD), UKRI-GCRF, UK	Registration, travel and subsistence funds to members to attend symposium	4 (1 trainee)
Trevor Platt Science Foundation, India	Registration, travel and subsistence funds to early career researchers to attend symposium	2 participants
Nansen Scientific Society, Norway	Registration, travel and subsistence funds to students to attend symposium	2 participants
Scientific Committee on Ocean Research (SCOR)	Registration, travel and subsistence funds to students to attend training and symposium	1 trainee
Western Indian Ocean Marine Science Association (WIOMSA), S. Africa	Registration and travel fund to member to attend symposium	1 participant
Plymouth Marine Laboratory, UK	Venue and logistical support of in-person training and symposium, venue for poster presentation	Symposium host
NEODASS, UK	Training components	in kind contribution
Brewtech, UK	Mini Secchi Disks for the training participants	



Figure 2: POGO Presence at the Symposium. (Top) Former POGO trainees and POGO Office bearers at the Symposium. (Bottom Left) From left to right: Sophie Seeyave (POGO Chief Executive Officer), Shubha Sathyendranath (Director TPSF and former Executive Director, POGO), Prof. John Field (former Chair of POGO), Prof. Nick Owens (POGO Chair), Prof. Howard Roe (former Chair of POGO) and Dr. Lilian Krug (POGO Scientific Coordinator) at the symposium. (Bottom right) Former NF-POGO Centre of Excellence in Observational Oceanography scholars who participated in the symposium

## 1.5 ORGANISATION

### 1.5.1 Webpage and promotion:

A webpage dedicated to the TREVOR symposium and another dedicated to the preceding training “Satellite-based tools for investigating aquatic ecosystems” were created on the TPSF Website. Both pages concentrated all the information regarding the events. In addition, a flyer was designed and distributed to promote the Symposium even further. It conveyed the essential details such as date, venue, theme, and registration information (Fig. 3).

The symposium was announced mainly through social media posts and mailing lists from TPSF and partner institutions (sponsors). The goal was to ensure widespread dissemination of information and attract a broad international audience.

# Trends, Reflections, Evolution and Visions in Ocean Research

A celebration of the scientific life of Trevor Platt



## SAVE THE DATE

**7-8 AUGUST 2023**  
Pre-symposium training  
for young researchers

**9-11 AUGUST 2023**  
SYMPOSIUM

**11<sup>th</sup> AUGUST 2023**  
Afternoon  
Annual meeting of the TPSF

at PML, UK

Prospect Place, Plymouth  
PL1 3DH, United Kingdom



The Trevor Platt Science Foundation and partners are pleased to announce their **inaugural science symposium** which will take place on 9-11 August 2023 at the Plymouth Marine Laboratory (PML) UK, to carry forward Trevor's legacy in ocean research and international collaboration.

We invite abstracts for talks or posters on the following themes to which Trevor made significant contributions:

- ▲ Primary production, physiology and ecology of marine phytoplankton;
- ▲ Thermodynamics of aquatic ecosystems;
- ▲ Physical and biological interactions;
- ▲ Marine optics;
- ▲ Size structure of marine communities;
- ▲ Remote sensing of ocean colour;
- ▲ Ocean carbon cycle and climate change;
- ▲ Water quality and human health;
- ▲ Time series of ocean observations and their analyses;
- ▲ Ecological approaches to fisheries management; and
- ▲ International collaboration and capacity building

**Associated training course:** The symposium will be preceded by a training course on remote sensing of ocean colour and modelling primary production, on 7-8 August 2023.

For further details, please visit

<https://www.trevorfoundation.org/symposium>



Figure 3: Flyer prepared to promote the TREVOR Symposium

## 1.5.2 Registration Fees

The organising committee computed registration fees (Table 3) for participants considering various expenses related to the local organisation of the training and symposium. This includes provisions for the marquee rental to host poster sessions, lunches over the 5-day duration of the events, an ice-breaker event tailored for the trainees, the symposium dinner, and other incidental costs.

**Table 3: Registration fees**

Event	Registration fee (£)
Symposium only (students/ developing country participants)	150
Symposium only (Early bird registration)	200
Training course and symposium (trainees)	200
Symposium only (Late registration)	300



### 1.5.3 Call for abstracts and selection of participants:

The scientific domains in which Trevor Platt had left his mark were identified and grouped into 11 themes to define the scope of the symposium, as follows:

- Primary production, physiology and ecology of marine phytoplankton
- Thermodynamics of aquatic ecosystems
- Physical and biological interactions
- Marine optics
- Size structure of marine communities
- Remote sensing of ocean colour
- Ocean carbon cycle and climate change
- Water quality and human health
- Time series of ocean observations and their analyses
- Ecological approaches to fisheries management
- International collaboration and capacity building

Abstracts were invited from students and researchers on these themes. Students and early career researchers were given the opportunity to apply for the online and hands-on training activities preceding the symposium. All participants who requested travel support were required to submit an abstract for the symposium. Experts on each theme screened the abstracts and assigned the abstracts to poster and oral presentations. Since the symposium was designed to serve as an opportunity for training early career researchers, care was taken to ensure that many early career scientists were given the opportunity to make oral presentations. Likewise, the applications for training programme were also screened by experts and around 40 participants were selected for in-person training. Selected candidates were informed of their selection for training as well as acceptance of their abstracts for oral or poster presentations at the Trevor Platt Science Symposium.

Book of abstracts is available at <https://trevorfoundation.org/symposium/book-of-abstract/>.

### 1.5.4. Programme of the symposium:

With oral and poster presentations selected, the programme of the symposium was prepared (see symposium programme). Key-note and invited speakers were identified. To accommodate all themes in the course of three days of the symposium, themes were combined into session topics: physical and biological interactions; marine optics and ocean colour; physiological ecology of marine phytoplankton; water quality and human health; and size and ecosystem structure of aquatic communities. Each session was co-chaired by a senior and an early career researcher with expertise on the respective topic. In addition to six sessions organised around these topics, three networking sessions were also organised on the following topics:

- What worked well in capacity building and how to sustain it?
- UN-Sustainable Development Goals related to water
- Wrap up: Lessons learned and way forward

Poster presentations were organised into two sessions held on day 1 and day 2 of the event. 68 posters were presented on the first day, and 47 on the second day. On each day, the presenters could exchange information with the audience during coffee break.

Detailed logistics, including venue setup, visa procurement assistance, technical requirements, and accommodation arrangements, were addressed in parallel.

### 1.5.5 Participation details

The symposium was attended by a diverse audience, accounting for 140 participants from 43 countries in 5 continents (Figure 4). Participants included senior and early career researchers, and students, with maximum number of participants from the United Kingdom (28), followed by India (19). A total of 68 people represented 24 developing countries participated in the symposium. Some 42% of the attendees were students and 14% were retired scientists.

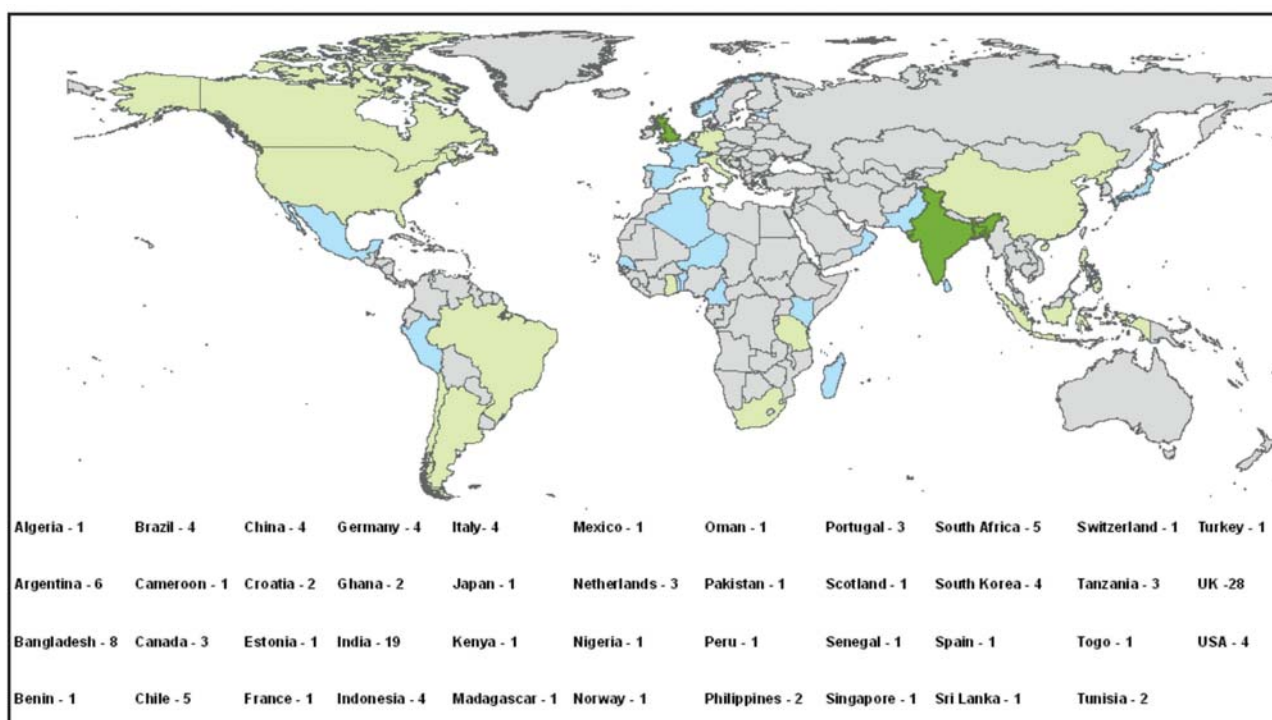


Figure 4: Number of participants per country represented at the TREVOR Symposium

### 1.5.6 Book of abstracts

A digital book of abstracts was prepared including all the abstracts accepted for oral and poster presentations. It contained details on the authors, affiliations, session, and day and date of presentation (for both oral and poster), and was published on the website (book-of-abstracts).

### 1.5.7 TREVOR Symposium

The TREVOR Symposium was held from 9 to 11 August 2023 at Plymouth Marine Laboratory. Key-note lecture was delivered by Prof. Nick Owens and the invited talks were presented by Prof. Heather Bouman, Prof. •arko Kovaè, Dr. Ana Dogliotti, Dr. Thomas Ryan-Keogh, Dr. Nandini Menon, and Dr. Angus Atkinson. Each oral session was co-chaired by one senior and one early career researcher. Many of the speakers shared their research and life experiences with Prof. Trevor Platt, and emphasised how their interactions with Prof. Platt had motivated their own efforts to continue Trevor’s scientific and capacity building legacy.

Through 7 oral sessions, including an inaugural session, 35 oral presentations were made and 115 posters were exhibited over the three days. Three networking sessions were held, each involving panel discussions and participation by all attendees.

- *Capacity Building:* Led by Dr. Vivian Lutz, Dr. Margareth Kyewalyanga, and Dr. Sophie Carler, this session dealt with best practices in capacity-building initiatives and discussed challenges faced by participants from developing countries.
- *UN-SDGs Related to Water:* Led by Dr. Stefano Ferretti, Dr. Milton Kampel, and Dr. Gemma Kulk, this session explored challenges and solutions related to sustainable water management in the context of UN Sustainable Development Goals and the concept of One Health.
- *Wrap-Up Session:* Led by Dr. Sophie Seeyave and Dr. Raisha Lovindeer, this concluding session provided an opportunity for funding agencies to discuss take-home messages and for participants to provide feedback and suggestions for follow-up activities.



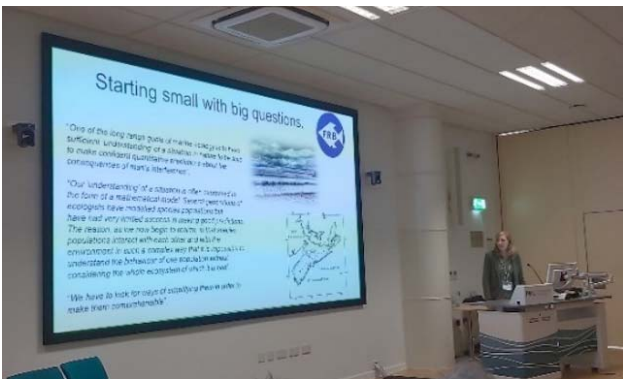




Figure 5: Glimpses of the TREVOR Symposium



Figure 6: In memory of Trevor Platt's passion for music, Celso Leal, music teacher, along with his colleagues and students from Brazil entertained the participants with an online guitar concert

### 1.5.8 Lifetime achievement award for capacity building

Dr. Venetia Stuart, former Project Scientist of the International Ocean Colour Coordinating Group (IOCCG) was awarded the first Trevor Platt Lifetime Achievement Award for her role in capacity building in ocean colour science. The award was presented by Prof. John Field from South Africa, who had been Venetia's PhD thesis supervisor. The award was a bespoke glass art work, depicting the various hues that emerge when light falls on water and phytoplankton.

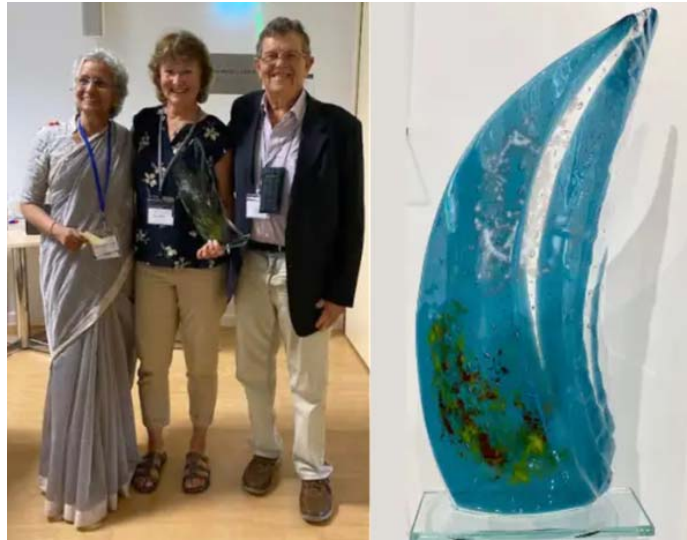


Figure 7: (L) Dr Venetia Stuart, sided by Dr Shubha Sathyendranath and Prof John Field, received the first Trevor Platt Lifetime Achievement Award for capacity building. (R). The award

### 1.6 FEEDBACK FROM PARTICIPANTS

A real time feedback survey was conducted during the last session of the Symposium, chaired by Dr. Raisha Lovindeer and Dr Sophie Seeyave. The responses showed that 72% of the participants flew long distance to participate in the symposium. Some 97% of the participants responded that they were satisfied or highly satisfied with the event with a high demand to make the symposium an annual or biennial event.

The aspects pointed out as the most and least valuable during the symposium were the networking and poster sessions, respectively. The first was highly praised as a venue for real discussion that included all participants, while the latter was pointed as the least effective due to the limited physical space reducing effective interaction among participants.

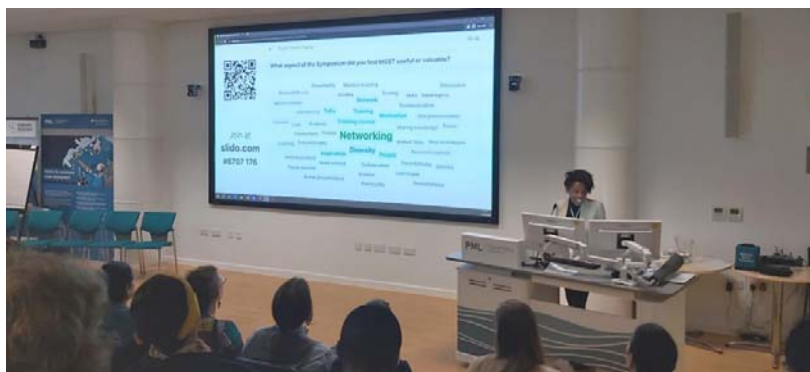


Figure 8: Raisha Lovindeer conducting the slido poll to get feedback on the symposium

## 1.7 PLANS FOR THE NEXT TREVOR SYMPOSIUM

The Trevor Platt Science Foundation is considering the possibility of organising a similar event three years from now, in response to the feedback from the participants.

## II. TRAINING COURSE

### 2.1 BACKGROUND

The organisation committee decided that an international training course conducted in conjunction with the symposium would help maximise the benefits from the symposium for early career researchers. Synchronised with themes of the symposium, an international hands-on training on satellite remote sensing was proposed and agreed on, as a 2-day event before the symposium. As only limited people could be accommodated for an in-person training, an online training was also proposed to teach in detail the principles and methodologies of satellite remote sensing applications.

### 2.2 OBJECTIVES

- To provide a forum for early career scientists and students to learn the fundamentals of, and recent developments in, 'Satellite based tools for investigating aquatic ecosystems'
- To assemble renowned educators from the world, to provide the lectures and the practical sessions

### 2.3 APPROACH

The training consisted of an online as well as an in-person component.

The online component was a made up of 17 webinars, organised into four modules on the following topics:

- General Introduction
- Water quality and human health
- Ocean ecosystems and climate
- Data analysis and processing tools

Each module was comprised of 4 to 5 lecture webinars. There were no restrictions on registering and attending the online training.

The in-person training component 'Satellite-based Tools for Investigating Aquatic Ecosystems' focused more on the methodology – extraction and use of satellite data and their application in research. The number of participants was limited to around 40 taking into account the facilities available. The trainees selected by an expert committee attended the in-person training, during which they were also given an opportunity to work on, and plan their research around a topic of their interest using satellite tools and were invited to present their findings and plans.

### 2.4 SPONSORING PARTNERS

Various sponsoring partners supported the participation of 41 young researchers selected for training (Table 2). They were taught by 8 trainers from EUMETSAT, PML, University of Exeter and 3 assistant trainers from NERCI (India), CMFRI (India) and a former PML scientist. The expenses of many of the trainers were also met by the sponsoring agencies.

The online training was organised with the dedicated and highly efficient support of the ESA Conference Support Team and the ESA Capacity Building cell, who provided full logistical support through interactive Webex webinar set up. The Webex platform for screening the lectures was provided by ESA, who served as the hosts. Able organisation and logistical support were provided by Sabrina Lodadio, Ulla Vayrynen, Irene Renis, Francesco Sarti and Martin Fabrizio.

## 2.5 ORGANISATION OF ONLINE TRAINING

The online training course ‘Satellite based tools for investigating aquatic ecosystems’ included 17 webinars around four themes as noted above. Webinars were organised with one lecture per week, from 5 April to 26 July, 2023. Renowned scientists, many of who were former trainees or students of Trevor Platt, volunteered to speak on their topics of expertise. Each event was of 2 hours duration – one hour of lecture, followed by one hour of panel discussion responding to questions and comments from the participants. The number of attendees ranged from more 400 for the general introductory sessions to 160–350 for the specialised lectures. The attendance did not drop of significantly during the Q&A session. Total watch time online for the webinars was approximately 8000 hours.



Figure 9: Backdrop for the online training course



**Table 4: Modules and programme schedule of the online training programme**

<b>Date</b>	<b>Lecture Title</b>	<b>Speaker</b>	<b>Affiliation (Institution, Country)</b>
05/04/2023	Introduction To: Remote Sensing of the Oceans	Dr Lauren Biermann	Plymouth Marine Laboratory United Kingdom
12/04/2023	Introduction To: Ocean Colour	Dr Ana Dogliotti	National Scientific and Technical Research Council (CONICET) Argentina
19/04/2023	Introduction To: Data Repositories and Access	Dr Ben Loveday	EUMETSAT Germany
26/04/2023	Introduction To: Remote Sensing in Coastal Waters	Dr Seunghyun Son	National Oceanic and Atmospheric Administration (NOAA) United States of America
03/05/2023	Water Quality and Human Health: The role of Earth observation in mapping risk from water-borne diseases	Dr Shubha Sathyendranath	Plymouth Marine Laboratory United Kingdom
10/05/2023	Water Quality and Human Health: The role of Earth observation for water quality and flood mapping	Dr Gemma Kulk	Plymouth Marine Laboratory United Kingdom
17/05/2023	Water Quality and Human Health: User engagement and citizen science for water quality	Dr Grinson George	Central Marine Fisheries Research Institute India
24/05/2023	Water Quality and Human Health: Applied Geotechnologies for Ocean and Human Health	Dr Milton Kappel	Instituto Nacional de Pesquisas Espaciais (INPE) Brazil
31/05/2023	Ocean Ecosystems and Climate: Ocean Colour and Climate	Dr Thomas Jackson	Plymouth Marine Laboratory United Kingdom
07/06/2023	Ocean Ecosystems and Climate: Primary Production	Dr Bob Brewin	University of Exeter United Kingdom
14/06/2023	Ocean Ecosystems and Climate: Phytoplankton Community Structure and the Carbon Cycle	Dr Heather Bouman	University of Oxford United Kingdom
21/06/2023	Ocean Ecosystems and Climate: Indicators of Ecosystem Status	Dr Dionysios Raitzos	University of Athens Greece
28/06/2023	Data processing and analysis tools: SNAP	Dr Ana Ruescas	Brockmann Consult Germany

05/07/2023	Data processing: Ocean Colour and Earth Observation with Julia	Dr Gael Forget	Massachusetts Institute of Technology (MIT) United States of America
12/07/2023	Data processing and analysis tools: SeaDAS	Aynur Abdurazik & Daniel Knowles	National Aeronautics and Space Administration (NASA) United States of America
19/07/2023	Data processing and analysis tools: Artificial Intelligence	Dr Dave Moffat	Plymouth Marine Laboratory United Kingdom
26/07/2023	Data processing and analysis tools: Python	Dr Bror Jönsson	Plymouth Marine Laboratory United Kingdom

Subsequent to the online training course, the video recordings of the webinars were screened through the TPSF YouTube channel, which exceeded 3000 views during the online training period, and the channel now has +300 subscribers. Telecasting the lectures through YouTube helped those who had difficulties to manage the time difference between their home countries and the live streaming of the online lectures. Many participants reported that they found it helpful to return to the videos to refresh their memories. The YouTube link to the videos is <https://www.youtube.com/playlist?list=PLIDRPIgZKpUq4Gt5irhDItE4xsnxDMn3k>.

## 2.6 ORGANISATION OF IN-PERSON TRAINING

The candidates for in-person training were selected based on the nature of their ongoing work and their expertise in satellite remote sensing. Applicants were required to submit a prescribed application form along with an abstract to the TPSF Symposium as the first author, along with a statement of interest. From the shortlisted candidates, the various sponsoring agencies selected trainees based on their own criteria. Trainees were from 23 countries, of which 12 were developing countries.

Argentina 1	Estonia 1	Nigeria 1	Sri Lanka 1
Bangladesh 4	France 1	Philippines 2	Tanzania 2
Brazil 3	Germany 1	Portugal 1	Turkey 1
Canada 2 (including 1 assistant trainer)	India 6 (including 2 assistant trainers)	South Korea 2	UK 7
China 1	Indonesia 1	Spain 1	USA 2
Chile 1	Madagascar 1	South Africa 1	

27 out of the 44 trainees were sponsored. The in-person training was conducted as per programme schedule on 7 and 8 August 2023 at Plymouth Marine Laboratory. The offline training was also focused on five themes – ocean colour data access, processing and interpretation; primary production; water quality and human health data tools; machine learning and EO; group work.

**Table 5: Detailed programme schedule of the in-person training****Day1 (07/08): MONDAY**

08:45-09:15	Registration		30 mins
09:15-09:39	Welcome, safety briefing etc and training overview	Thomas Jackson	15 mins
09:30-09:50	TOPIC1 Lecture: Ocean Colour (data access, processing and interpretation)	Hayley Evers King + Ben Loveday	20 mins
09:50-11:00	TOPIC 1: Practical Exercises with Ocean Colour	Hayley Evers King + Ben Loveday	70 mins
11:00-11:15	Coffee		15 mins
11:15-13:00	TOPIC 1: Practical Exercises with Ocean Colour continued	Hayley Evers King + Ben Loveday	105 mins
13:00-14:00	Lunch		60 mins
14:00-14:30	TOPIC 2 Lecture: Water quality and human health data tools	Gemma Kulk	30 mins
14:30-16:00	TOPIC 2: Practical exercises on Water quality and human health data	Gemma Kulk	90 mins
16:00-16:15	Coffee		15 mins
16:15:-16:45	Q/A, open discussion		30 mins
16:45:-17:45	Research Question Discussion session. Group project scoping and initiation.		60 mins
18:30	Ice-breaker – Pizza and soft drinks		

**Day2 (08/08): TUESDAY**

09:00-09:30	TOPIC 3 Lecture: Ocean biogeochemical cycles and Primary Production	Bob Brewin	30 mins
09:30-11:00	TOPIC 3: Modelling primary production in Python and Jupyter notebook	Bob Brewin	90 mins
11:00-11:30	Coffee		15 mins
11:30-12:00	TOPIC 3: Modelling primary production in Python and Jupyter notebook continued	Bob Brewin	30 mins
12:00-12:30	TOPIC 4 Lecture: AI	David Moffat	30 mins
12:30-13:00	TOPIC 4 exercises: AI	David Moffat	30 mins
13:00-13:45	Lunch		45 mins
13:45-15:30	TOPIC 4 exercises: continued	David Moffat	105 mins
15:30-16:00	Q/A, open discussion		30 mins
16:00-17:15	Group project work (continued from yesterday).		75 mins
17:15-18:00	5 minute group presentations (9-10 presentations)		45 mins

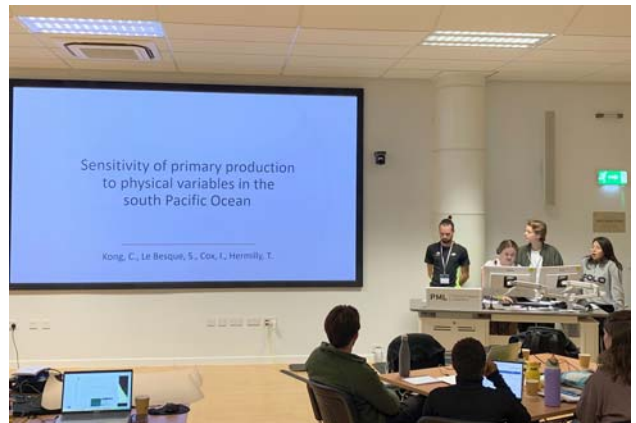




Figure 10: Glimpses of the in-person training and participant presentations

## 2.7 FEEDBACK FROM PARTICIPANTS

The feedback form was organised on a scale of 0-5. The participants gave high average score for both content topics (4.73/5) and teaching (4.65/5). The general opinion was that the online training was beneficial to understand the basics of a broad range of topics that are essential for aquatic research using satellite data. The chat box during the online course was well managed. However, participants expressed the need for more practical lectures with more step-by-step usage of the different software available for working with remote sensing products. All appreciated the closeness of TPSF members and organisers and the cordial behaviour of organisers toward the participants, which all was evidently nurtured by Trevor Platt.



*Figure 11: Group photo of training participants*

## **ACKNOWLEDGEMENTS**

In addition to our sponsoring partners, the TREVOR Symposium and Training Course organising committee would like to thank the following people for their unstinting contributions and dedication to various aspects of the preparation of this event:

Suzanne Hawkins, Meryl Hopper, Christina Devereux and Cathy Woods (Science Support team, PML), and Justine Dolling (Finance team, PML) who helped with travel and accommodation as well as financial support for the participants funded through PML's projects and TPSF as well as logistical support and house keeping;

Stephanie Raw and Louise Baker from PML who helped with reception and logistics; Lee Merchant and his team (PML) for logistical support and house keeping;

Mrs. Lydia Nelson (TPSF, India) who managed the correspondence with the symposium participants and trainees;

Laura Ruffoni and Karolina Iwaniak (POGO Secretariat), who organised travel and financial support for many participants; and

Sabrina Lodadio, Irene Renis, Ulla Vayrynen, Martin Phillipsen, Fabrizio Pera, and Francesco Sarti from ESA, who managed the Webex platform for the pre-symposium online training, and in many other numerous ways.

**Trevor Platt Science Foundation**

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