

Open Call for Expression of Interest (EOI) to coordinate and host the advanced IOCCG summer lecture series: *Frontiers in ocean optics and ocean colour science* from 2024 onward

The IOCCG Summer Lecture Series (SLS) is a no-fee, two-week course, dedicated to high-level training in the fundamentals of ocean optics, bio-optics and ocean colour remote sensing. Senior scientists volunteer their time and provide lectures and practical sessions on fundamentals of ocean optics, and cutting edge research, focusing on current critical issues in ocean colour science. Students are given ample opportunity to meet with the lecturers for in-depth discussions on various pre-selected topics, as well as on their own scientific research. This training course is open to young graduate scientists and post-doctoral fellows, as well as researchers with a longer record in ocean colour research hoping to broaden their knowledge. Reports and videos from previous IOCCG Summer Lecture Series can all be viewed on the IOCCG website (<https://ioccg.org/what-we-do/training-and-education/lectures/>).

From its inception, the SLS has been coordinated by David Antoine, who was affiliated with the Laboratoire d'Océanographie de Villefranche (LOV), France, the host of the SLS for the past 10 years. The first SLS was held in 2012, and the course has occurred every other year since then (2014, 2016, 2018, 2022), with 2020 being the exception. The IOCCG is grateful to LOV for being the home of the SLS for the past 10 years, to David Antoine, for being the SLS coordinator, and to all the lecturers who volunteered their time to the training course.

The IOCCG is now accepting expressions of interest for a new volunteer coordinator and host venue for the SLS. We welcome expressions of interest to be submitted to the IOCCG Project Coordinator, Raisha Lovindeer (raisha@ioccg.org) from potential coordinators attached to institutions that have the capacity to host the SLS. The deadline is **31 May 2023**. See course details below.

Course timing and frequency

The course typically occurs in late June, early July.

The SLS is two full weeks in duration, consisting of a series of lectures followed by open discussion sessions as well as hands-on practical/lab sessions. The last 1-2 days are dedicated to specific sessions where participants are encouraged to apply their learning to problems surrounding their own research, or adjacent topics and share their thoughts after the two-week course.

The SLS is organized every other year, in even years. The next course would be organized for the summer of 2024.

Past and future audience

The course is open to any student or scientist with a minimum background in ocean optics and ocean colour science. All attendees possess post-graduate degrees (up to the Masters level), with students undertaking their PhD studies also participating. Other attendees include post-doctoral fellows or early career researchers.

The IOCCG facilitates applications through the IOCCG website, and applications typically open at the start of the year the course is held. An average of around 140 applications have been received each round. Selection of students is based on CVs, and short statements about their motivation and expectations. The final selection is based on the quality of applications received, while balancing students from countries with economies in transition and developed countries. Applications are reviewed and students are selected by a scientific committee formed through the IOCCG.

Attendance is around 20-24 students per course, who are fully funded, either by their institution or by funds solicited by the course coordinator from course sponsors.

Teaching staff

The teaching staff are composed of 10-12 volunteer lecturers from all over the world, whose travel is also typically fully funded. Lecturers are senior scientists with strong leadership skills and recognized contributions in their field of expertise. They provide students with a quasi-exhaustive view of their subject area, in particular outlining what has already been achieved as well as clear indications of the “hot topics” in ocean colour science where efforts should be directed preferentially in the future.

Administrative staff

Administrative staff help to organize the logistics of the SLS and are available to assist students and lecturers who are new to the area upon arrival. As the lectures are recorded (see below) a staff member is also helpful to assist with recording set-up. In the past, administrative staff have been provided by the host venue. It is our desire that the new venue also have 1-2 administrative staff members who could fill this role, as they are critical for managing logistical concerns on-site during the SLS.

Lecture recordings

All presentations are audio and video recorded with the permission of the instructors and attendees, and are made available through links on the IOCCG website. It is our desire that future lectures at a new venue also be recorded for upload and viewing through the IOCCG website. Past SLS hosts have also hosted the recordings on dedicated pages through their institute website. This capability, if available, is welcomed by the proposing institution, but is not a requirement.

SLS Funding

IOCCG provides partial funding for the SLS. For the last 3 editions, IOCCG covered roughly 20-25% of the total cost. For these editions, local housing for students was provided by the host, and/or other sponsors were solicited by the SLS coordinator. Main sponsors have included CNES, EUMETSAT, OCB, SCOR, Copernicus, and local hosts in Villefranche (Villefranche Observatory-OOV, Institut de la mer de Villefranche-IMEV). The SLS is only possible if local costs (e.g., student accommodation) are available at the host institution or significantly subsidised/additional external sponsors are solicited.

Expectations of the coordinator

The SLS coordinator is the main champion for the SLS on behalf of the IOCCG. The SLS coordinator solicits funding for the course (IOCCG provides partial funding), proposes and

invites lecturers based on their subject areas, creates the course agenda (templates available), and is on site at the host institution to help to execute and manage course logistics for the duration of the SLS. The coordinator works closely with the IOCCG Project Office, which manages advertisement of the SLS, online applications, and notifications of applicants, through the IOCCG website and software tools. The SLS coordinator is also expected to keep the IOCCG Committee updated on the plans for each SLS at the annual Committee Meeting, and to complete a short report after each SLS has been completed (template available).

Requirements of the host venue

The SLS coordinator should be affiliated with a host venue. Ideally, the proposed venue should:

1. Be able to accommodate 20-24 students for 2 weeks during the northern hemisphere summer, including housing
2. Be able to accommodate 10-12 lecturers, or be near enough to external accommodation to make a daily commute accessible
3. Be accessible to an international in-person audience (proximity to international airport/international train or bus stations)
4. Have lab space (with access to running water) for in-lab practicals.
5. Be a lab capable of providing phytoplankton cultures for labs about measurements of absorption (optional, but ideal)

Expressions of interest should include 1) the name of the proposed SLS coordinator and a **brief** description of their suitability for the role, 2) the name and location of the host institution and how it meets the host requirements listed above. EOIs are being accepted by email to the IOCCG Project Coordinator, Raisha Lovindeer (raisha@ioccg.org) until **31 May 2023**.