



**GESAMP**  
Joint Group of Experts on the  
Scientific Aspects of Marine  
Environmental Protection



ΠΑΝΕΠΙΣΤΗΜΙΟ ΚΡΗΤΗΣ  
UNIVERSITY OF CRETE

GESAMP Working Group 38:  
*The Atmospheric Input of Chemicals to the Ocean*

## **Research priorities for improving global chemical flux estimates of atmospheric deposition to the ocean**

*A UN/GESAMP workshop held at the University of Crete, Heraklion, Greece  
April 7-10, 2025*

Transport will be provided from the hotel to the University at the start and end of each day for all participants. Please assemble at the entrance to the Capsis Astoria Hotel at 8.15 am - the bus will leave by 8.30 so we can start promptly at 9.00.

### **Agenda**

**DAY 1 - Monday, April 7 (Computer Science Department, University of Crete)**

09.00-1045: Chair, Tim Jickells (Room B318, Computer Science Department)

#### **Introductory Plenary Session**

0900-0920: Welcome and workshop logistics

*Rector (tbc), University of Crete*

*Maria Kanakidou, Professor, University of Crete*

0920-0935: Participant introductions - each participant give about a 15 second introduction of themselves

0935-0950: Workshop goals and operation

*Tim Jickells, GESAMP Working Group 38*

0950-1030: Scientific sponsor and user group introductory comments, introducing their organizations and their aspirations for the workshop

*Bob Duce, UN/GESAMP and its Working Group 38*

*Paolo Laj, World Meteorological Organization/Global Atmospheric Watch (GAW)*

*William Miller, Future Earth - Surface Ocean/Lower Atmosphere Study (SOLAS)*

*Peter Croot, International Council for Science - Scientific Committee on Oceanic Research (SCOR)*

1030-1045: **European Organization for the Exploitation of Meteorological Satellites (EUMETSAT)**

*Thierry Marbach, EUMETSAT, “EUMETSAT Cal/Val Needs over Ocean”*

10.45-11.15:

**Coffee break**

11.15-1230: (Rooms B318 and E311, Computer Science Department)

**Measurement (chairs, Alex Baker, Cecile Guieu, Bob Vet) and Modeling (chairs, Maria Kanakidou, Joshua Fu, and Douglas Hamilton) Groups begin meeting.**

The two groups would basically try to identify what the weaknesses are in the current measurement programs and modelling efforts and what is needed to remove or otherwise ameliorate those weaknesses. The group leaders might want to have some specific presentations on aspects of this, and/or perhaps have different panel discussions in their group on what the weaknesses are and another on what needs to be recommended and done to overcome the weaknesses, or something similar.

There may well need to be some additional interactions between the two groups beyond the scheduled plenary sessions. The meeting schedule is designed to be flexible and we will arrange such additional sessions as the need arises.

1230-1330:

**Lunch**

1330-1530: (Rooms B318 and E311, Computer Science Department)

**Continued parallel meetings of the Measurement and Modeling Groups under the previous chairs**

1530-1600:

**Coffee break**

1600-1730: (Rooms B318 and E311, Computer Science Department)

**The two groups continue their independent deliberations.**

**Evening: There will be a reception at 1900 at the Capsis Astoria Hotel before dinner at local restaurants. Accompanying partners are welcome.**

DAY 2 - Tuesday, April 8 (Chemistry Department, University of Crete)

0900-1030: (Rooms Head of the Dept office (HD) and General Assembly (GA), Chemistry Department)

**The two groups continue their independent deliberations.**

1030-1100:

**Coffee break**

1100-1230: (Rooms HD and GA, Chemistry Department)

**The two groups continue their independent deliberations.**

1230-1330:

**Lunch**

1330- 1530: Chair – Bob Duce (Seminar Room, Chemistry Department)

**In plenary session each group will report on what they have done and are planning for their further effort, with a general discussion following.**

1530-1600:

**Coffee break**

1600-1730: (Rooms HD and GA, Chemistry Department)

**The 2 groups reconvene independently with their chairs and continue their deliberations, considering the comments from the plenary session. Each group will develop a short informal draft report that outlines the issues they found and their solutions to them.**

### DAY 3 - Wednesday, April 9

**The day will begin **TIME?** with a short tour of the Heraklion Archaeological Museum, which is across the street from the Astoria Capsis Hotel. Accompanying Partners are welcome. We will then travel to the University rather later than on other days.**

1015-10.45:

**Coffee break**

10.45-11.15: Chair- William Miller (Room B318, Computer Science Department)

**Plenary session, with presentations of the 2 draft reports and discussion of what further needs to be done.**

11.15-1230: Chair - Peter Liss (Room B318, Computer Science Department)

**Plenary discussion of model/measurement fusion, involving all participants.**

**This is a technique utilised by modellers but dependent on input from measurement community, so the idea of this session is to align the aspirations and capabilities of the two communities. The modelling community will provide an introduction to the approach to kick off the session.**

1230-1330:

**Lunch**

1330-1530: Chair - Cecile Guieu (Room B318, Computer Science Department)

**Summary plenary discussion of where we are and what we still need to do at the workshop. Discussion and responses from the user community/oceanographers.**

1530-1600:

**Coffee break**

1600-1730: Chair - Cecile Guieu (Room B318, Computer Science Department)

**Continue previous session discussion. Begin drafting our overall workshop report.**

**Evening: A dinner is planned for the whole group and any accompanying partners at Veneto1860 Bar-Restaurant – Epimenidou 9, Heraklion, not far from the hotel. **TIME?** More information will be given at the workshop.**

**DAY 4 - Thursday, April 10: (Computer Science Department, University of Crete):**

Morning/early Afternoon: Chairs - Alex Baker and Maria Kanakidou (Room B318, E311 Computer Science Department)

**Partial day session in plenary (Room B318) or in separate groups (Room B318, E311) as necessary for more writing and hopefully completing our report. Discussion of what additional writing is necessary for papers to be published in peer-reviewed journals. Wrap up the workshop, looking at the next steps beyond the meeting including reporting back to sponsors. We aim to finish relatively early in the afternoon and some people may wish to start their journey home that evening.**

**Coffee breaks as necessary**

*We sincerely appreciate financial support from the United Nations Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP), the World Meteorological Organization and its Global Atmospheric Watch (WMO/GAW), the International Atomic Energy Agency (IAEA), the International Maritime Organization (IMO), as well as Future Earth's Surface Ocean/Lower Atmosphere Study (SOLAS) and of course the University of Crete.*