

SESAME'S 2nd SUMMER SCHOOL

Coupled Ecological Modelling

8-13 June 2009, Kappara, Malta



SESAME's 2nd Summer School on 'Coupled Ecological Modelling' will take place at the Sundown Courts in Kappara, Malta, from 8 – 13th June 2009. The course will be hosted by the Physical Oceanography Unit of the IOI-Malta Operational Centre at the University of Malta. The event is co-organised with The Black Sea Commission and CIESM.

The school will offer participants theoretical and practical background on numerical models simulating the dynamics of the marine ecosystem, and the physical-biological interactions. It will provide the theoretical concepts leading to the parameterisation of marine ecological/biogeochemical processes (primary, microbial, secondary production, predation/grazing, nutrient cycling) and to their translation into algorithms suitable for numerical simulations in a coupled physical/ecological framework.

The summer school will consist of an intensive series of lectures, laboratory and discussion sessions. Thus, theoretical background will be translated in practical information through the description of state-of-the-art numerical marine ecosystem models, and through hand-on sessions that will give participants the opportunity to start practising the use of such models.

Topics to be covered by the school are:

General structure of marine ecosystem models
Physical-biological interactions in marine ecosystems
Modelling lower and higher trophic levels
Model calibration
Model validation

Host Institute: The IOI-Malta Operational Centre of the University of Malta

Who may apply: The Summer School is open to young researchers and PhD students, with a biological and/or physical oceanography background, willing to expand their field of interest. The course is limited to 20 participants

Pre-requirements for the applicants: General knowledge of Biological or Physical oceanography; experience with computer programming languages will be an advantage.

How to apply: Fill in the **Application Form** and send it together with any relevant documents electronically to **Dr. Aldo Drago (aldo.drago@um.edu.mt)** or **Mr. Adam Gauci (agau012@um.edu.mt)** no later than **3 April 2009**.

Selection criteria: The selection will be done by members of the Steering Committee, based on the CV, the motivation of the applicants and the relevance to SESAME objectives. The candidates will be notified about the final results by e-mail. The list of the successful candidates will be also posted on the website.

Financial conditions: All expenses (air fair ticket, accommodation, meals and small per diem) will be covered by the SESAME Project, The Black Sea Commission and CIESM. The travel arrangements will be made centrally and arranged by IOI-Malta.

Important dates:

Deadline for Application: **3 April 2009**

Notification of Successful candidates: **24 April 2009**

Course dates: **8-13 June 2009**

More information about the summer school on <http://www.sesame-ip.eu/scientist/summer-schools>

This course is being organised as part of the SESAME Project. SESAME aims to assess and predict changes in the Southern European Seas (Mediterranean and Black Sea) ecosystems and in their ability to provide key goods and services with high societal importance, such as tourism, fisheries, ecosystem biodiversity and mitigation of climate change through carbon sequestration in water and sediments.

The Mediterranean and Black Seas are both unique and evolve rapidly with large inter-annual to decadal variability and abrupt fluctuations. For this reason, SESAME will merge economic and natural science in order to study the changes in the Western and Eastern Mediterranean and Black Sea. To this end, it will bridge the gap between natural and socio-economic sciences in order to assess the ability of the ecosystems to sustain these essential functions. The goal is to give the opportunity to understand, based on existing knowledge, how the Mediterranean and Black Sea ecosystems are functioning and how their goods and services can be sustained under different scenarios.

Furthermore, SESAME will create a platform for disseminating the research results to all levels of society. It will stimulate and strengthen international cooperation in the Mediterranean and Black Sea regions through the participation of research organizations from Member States, Associated States, Associated Candidate countries, non-EU Mediterranean and NIS countries as well as international organizations.

SESAME will promote a "knowledge conveyor belt" through various opportunities, such as summer schools and training activities. To this end, SESAME successfully completed its first summer school on 'Statistical Analysis of Biological data and Times-Series in August 2008 in Varna, Bulgaria. The operation of SESAME's summer schools will increase the potential scientific capacity and provide an opportunity for experienced scientists from all disciplines to meet. The schools target members of the research community, in the wide sense, primarily postgraduate students and young researchers.

For more information on the project please visit our website at <http://www.sesame-ip.eu>