

Summer School: Integrated approaches to investigate the role of benthic organisms in soft and hard substrate in ecosystem functioning: from field observations and experiments to modeling and indicator development.

(STARESO Research Station, Calvi, Corsica, July 17th-21, 2017)

SCOPE

During the last decade, artificial hard substrates have increasingly been installed in coastal areas that generally consisted of sandy sediments. These artificial hard substrates serve different purposes, including coastal defense works, installation of renewable energy installations, nature restoration...

These artificial hard substrates are home of a high variety of fouling organisms, occurring in high densities. These new communities locally affect primary production and the pelagic nutrient budget and change sediment properties, structural and functional diversity of the benthos, and benthic mineralization rates. In addition, the effects of these introductions need to be addressed in the context of a globally changing marine environment (climate change, ocean acidification). A full understanding of links between the altered biodiversity and the local and regional biogeochemical cycles requires cross-disciplinary approaches where ecologists, biogeochemist and ecosystem and oceanographic modelers join forces.

Within this summer school, PhD students and early post-docs will be initiated in experimental methodology to investigate the effect of animal activity on biogeochemical cycling in both sediments and the water column. Class-room lectures will provide participants with an overview on the recent developments in the research field and will be combined with hands-on experiments on both hard- and soft substrate biogeochemical cycling (optode and electrode techniques, nutrient cycling, bio-irrigation) using state-of-the art experimental equipment. Lectures on ecosystem and oceanographic modeling will show how local processes can be scaled up to regional scales. Finally, students will be initiated in the application of obtained results in a managerial context. A detailed programme is available at <https://goo.gl/0ckcSb>.

TEACHING STAFF

Karline Soetaert (NIOZ), Marilaure Grégoire (University of Liege), Arthur Capet (University of Liege), Steven Degraer (RBINS), Jan Vanaverbeke (RBINS), Ulrike Braeckman (UGent), Gert Van Hoey (ILVO)

DATE and VENUE

17-21 July 2017, STARESO Research Station, Calvi, France

SUBSCRIPTION FEE

The subscription fee for the course is 350 Euro, covering all course material.

Lodging and food is not included in this fee. Participants can stay in the dormitories of the STARESO Research Station (510 Euros, covering lodging breakfast, lunch and dinner).

EGU TRAVEL GRANTS

The European Geosciences Union provides 10 travel grants of 350 euro (covering the subscription fee). The travel grant can be claimed once the summer school is finished. Registration and payment of the subscription fee is therefore necessary. Application for a travel grant can be done on the registration form.

REGISTRATION

Registration can be done by fully completing the registration form available at <https://goo.gl/forms/NYSK7iCua30RDR5i2>. Registration will only be valid after paying the registration fee of 350 euro (IBAN: BE09 6792 0058 2357 – BIC: PCHQ BE BB – BPost, Royal Belgian Institute of Natural Sciences, Vautierstraat 29, 1000 Brussels), mentioning 'Your Name - Registration Summer School Calvi'.

FURTHER INFORMATION

Jvanaverbeke@naturalsciences.be

