



## **AUSTRAL SUMMER INSTITUTE XIV (ASI XIV)**

Department of Oceanography & COPAS Sur-Austral

Coastal and Open Ocean Studies Through Multiple Approaches  
University of Concepcion, Chile

January 2014

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### **Course description**

#### **Ecology and Diversity of Marine Microorganisms (ECODIM)**

**6-25 January 2014. Estación de Biología Marina de Dichato.**

The focus of ECODIM will be on how interactions between microorganisms and the marine environment shape biogeochemical processes in the oceans. The purpose is to provide an overview of the many facets of the exciting field of microbial ecology and diversity, as it relates to the role of marine microbes in the geochemical cycling of elements. The course aims to bring together various aspects of environmental, molecular and microbiological, as well as chemical and physical methodologies needed to approach questions of biogeochemical interest.

ECODIM 2014 will comprise field experiences (on board R/V Kay Kay II), lectures and exercises in the morning, guided research work in the laboratory and tutored computer exercises in the afternoon, colloquia in the evening and two symposium days, one by invited speakers as previously mentioned, the other organized by the students themselves. Preparatory discussions, exercises on particular course subjects, introduction to bioinformatics, computer aided thermodynamics in geochemical processes and metabolism were offered as exercises in small groups. With the didactic mix between lectures and talks by experts, workshops with tutorials and the students' own efforts (paper presentations, experimental design, and practical laboratory work), participants will be introduced into topics from the research front in microbial oceanography. Students will also be asked to suggest special topics and thus define their particular needs.