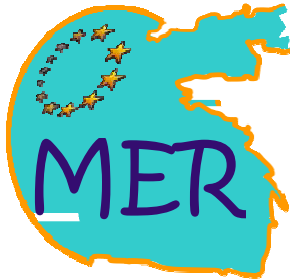




[www.ehu.es/CTA](http://www.ehu.es/CTA)

**INGURUMEN KUTSADURA ETA TOXIKOLOGIA  
CONTAMINACION Y TOXICOLOGIA AMBIENTALES  
ENVIRONMENTAL CONTAMINATION AND TOXICOLOGY  
GRADUONDOKO MASTERRA / MASTER DE POSTGRADO UPV/EHU**

Ref. MO2006-00749 <sup>(1)</sup>



**European Master of Science in Marine  
Environment & Resources**

[www.ehu.es/MER](http://www.ehu.es/MER)

**JOINT EUROPEAN POSTGRADUATE STUDIES**

Ref. MO2006-00744 <sup>(2)</sup>

**INTERNATIONAL POSTGRADUATE COURSE \***

## 1<sup>st</sup> SCIENTIFIC DIVER COURSE (3 ECTS)

May 6- June 11 2015, Plentzia Marine Station –  
Univ Basque Country (PIE-UPV/EHU)

**Organized by: CTA and MER Masters** (CTA & MER Doctorate Programs, UPV/EHU) Dept  
Zoology and Animal Cell Biology, Plentzia Marine Station (PIE), Univ Basque Country, Bilbao

**Supporting institutions:**

- Vicerrectorado del Campus de Bizkaia/Bizkaiko Campuseko Errektoreordetza
- University of the Basque Country
- Plentzia Marine Station (PIE-UPV/EHU)

**Additional information:**

MER & CTA Secretariat  
Plentzia Marine Station (PIE-UPV/EHU)  
Univ Basque Country, 48620 Plentzia-Basque Country  
TIn: 34 946018450  
e-mail: [sonia.monreal@ehu.es](mailto:sonia.monreal@ehu.es)  
[www.ehu.es/CTA](http://www.ehu.es/CTA) [www.merconsortium.eu](http://www.merconsortium.eu)

**Teaching Staff:**

Roberto Alvaro (Mare Fondum)  
María Bustamante (UPV/EHU)  
Amalia Martínez de Murguía (Donostia Aquarium)  
Endika Quintano (UPV/EHU)  
Iñaki Saiz (UPV/EHU)  
Alberto Santolaria (UPV/EHU)  
Manu Soto (PIE-UPV/EHU)  
Javier Tajadura (UPV/EHU)  
Javier Varona (Mare Fondum)

\* UPV/EHU Complementary Course (3 ECTS)

(1) Quality Award by Spanish Ministry of Education and Science (2005-2012)

(2) Erasmus Mundus Masters Course 2012-2018 & Quality Award by  
Spanish Ministry of Education and Science (2008-2012)

## Introduction

The International Postgraduate Course (3 ECTS\*) will take place during the months of **May & June 2015**.  
**Lecture rooms: Plentzia Marine Station, PIE-UPV/EHU, [www.ehu.es/PIE](http://www.ehu.es/PIE)**

The course is directed to postgraduate students and PhD candidates aiming to become specialized in the sampling methodology underwater. The only requisite is the possession before the starting of the course of a PADI Advanced Open Water Diver certification (or equivalent from another recognized diver training agency). All lectures will be held in English. Participants will receive a certificate with indication of lectures and practical sessions attended. The course is officially recognized by the UPV / EHU with 3 ECTS.

## Registration

The course is limited to 6 participants. The registration fee is **250 €** and includes attendance to all lectures and lab practicals and course documentation.

For registration, participants should fill in the registration form and send it to **Prof. Inaki Saiz** (email: [ji.saiz@ehu.eus](mailto:ji.saiz@ehu.eus)) before the **1<sup>st</sup> May 2015**.

Registrations after this date may be only exceptionally accepted. All participants will receive a notification of acceptance in the course.

### Accommodation:

Contact PIE-UPV/EHU Masters Secretariat  
by email: [sonia.monreal@ehu.es](mailto:sonia.monreal@ehu.es)

info+: [www.ehu.es/PIE](http://www.ehu.es/PIE)



Vicerrectorado del Campus de Bizkaia/Bizkaiko Campuseko Errektoreordetza



## PROGRAMME

### **MAY 6<sup>th</sup> WEDNESDAY: INTRODUCTORY REMARKS AND DIVERSITY**

**09:30-10:20;** "Introduction to Scientific Diver Course. Limitations of the Scientific Method Underwater." M Soto

**10:30-11:20;** "Basic Techniques of Sampling Underwater." M Bustamante

**11:40-12:30;** "Ecology of Rocky Subtidal Assemblages. Common Species of Algae and Invertebrates in the Basque Coast." (cont.) E Quintano, M Bustamante

**12:40-13:30;** "Ecology of Rocky Subtidal Assemblages. Common Species of Algae and Invertebrates in the Basque Coast." (cont.) E Quintano, M Bustamante

### **MAY 13<sup>th</sup> WEDNESDAY: FISH DIVERSITY IN AQUARIA**

**15:00-15:50;** "Visual Census of Fishes and Invertebrates in Aquaria." A Martinez de Murguía

**16:00-16:50;** Practical Session: "Visual Census of Fishes in Atlantic Aquaria." A Martinez de Murguía

**17:00-17:50;** Practical Session: "Visual Census of Fishes in Atlantic Aquaria." (cont.) A Martinez de Murguía

### **MAY 21<sup>st</sup> THURSDAY: FISH DATA ANALYSIS**

**09:30-10:20;** "Practical Session Lab: Processing and Storage of Fish Visual Data." I Saiz

**10:30-11:20;** "Computer Lab: Preliminary Data Analysis of Fishes." I Saiz

### **MAY 23<sup>th</sup> SATURDAY: BENTHIC FIELD SAMPLING UNDERWATER**

**08:30-09:20;** "Seminar: Planning a Sampling Programme of Macrozoobenthos." J Tajadura, E Quintano

**09:30-10:20;** "Field Practical Session: Scientific Dive." Mare Fondum, J Tajadura, E Quintano

**10:30-11:20;** "Field Practical Session: Scientific Dive." (cont.) Mare Fondum, J Tajadura, E Quintano

**11:30-12:20;** "Field Practical Session: Scientific Dive." (cont.) Mare Fondum, J Tajadura, E Quintano

**13:00-14:30;** "Practical Lab: Collection, Processing and Storage of Biological Samples." J Tajadura, E Quintano

### **MAY 28<sup>th</sup> THURSDAY: IDENTIFICATION OF BENTHIC SAMPLES & DATA PROCESSING IN LABORATORY**

**09:30-10:20;** "Practical Laboratory: Identification of Benthic Samples." J Tajadura, A Santolaria

**10:30-11:20;** "Practical Laboratory: Identification of Benthic Samples." (cont.) J Tajadura, A Santolaria

**11:30-12:20;** "Computer Lab: Biological Data Organization and Computer Management." J Tajadura, A Santolaria

**12:40-13:30;** "Seminar: The Structure of a Scientific Report." M Bustamante

**17:00-17:50;** "Computer Lab: Data Analysis with Computer Packages." M Bustamante

**18:00-18:50;** "Computer Lab: Data Analysis with Computer Packages." (cont.) M Bustamante

### **JUNE 6<sup>th</sup> SATURDAY: FISH VISUAL SAMPLING UNDERWATER**

**09:30-10:20;** "Seminar: Planning, Strategies and Organization of a Fish Visual Sampling." Mare Fondum

**10:30-11:20;** "Field Practical Session: Scientific Dive." Mare Fondum

**11:40-12:30;** "Field Practical Session: Scientific Dive." (cont.) Mare Fondum

**12:40-13:30;** "Field Practical Session: Scientific Dive." (cont.) Mare Fondum

**13:40-14:30;** "Practical Session Lab: Processing and Storage of Fish Visual Data." Mare Fondum

### **JUNE 10<sup>th</sup> WEDNESDAY: PLANNING A SCIENTIFIC REPORT**

**15:00-15:50;** "Seminar: Frequently Asked Questions in Scientific Reports." M Bustamante, E Quintano

**16:00-16:50;** "Seminar: Frequently Asked Questions in Scientific Reports." (cont.) M Bustamante, E Quintano

### **JUNE 11<sup>th</sup> THURSDAY: COMMUNICATION VIA SCIENTIFIC REPORT**

**15:00-15:50;** "Oral Presentations: Personal Scientific Reports by Students." M Bustamante, E Quintano

**16:00-16:50;** "Oral Presentations: Personal Scientific Reports by Students." M Bustamante, E Quintano

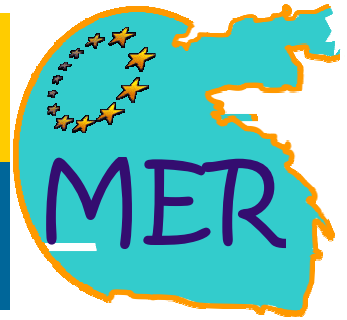
**17:00-17:50;** "Seminar: Final Conclusions and Future Projections." I Saiz

**MAY 6-JUNE 11<sup>TH</sup> 2015, PLENTZIA MARINE STATION, PIE-UPV/EHU**



**INTERNATIONAL  
POSTGRADUATE COURSE**

**SCIENTIFIC DIVER COURSE (3 ECTS)**  
May 6-June 11 2015, PIE-UPV/EHU, Plentzia



**Registration form: Sc Diver (UPV/EHU)**

Surname.....

Name.....

Title.....

Postal address.....

.....

Postal code.....City/Town.....Country.....

Telephone.....

Fax.....

e-mail.....

SIGNATURE:

PLACE AND DATE:



PIE-UPV/EHU Masters Secretariat  
Research Centre For Experimental Marine Biology and Biotechnology  
Plentzia Marine Station (PIE-UPV/EHU)  
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Tln: +34 946018450; e-mail: [sonia.monreal@ehu.es](mailto:sonia.monreal@ehu.es)