



# UPM IMPACT in SDG15

## Life on Land

### EELISA ACITIVITIES AROUND SDG15

IACH- InnovAction in Health care (Seasonal School)

Description

Curso de 20h de duración y formato online dirigido a trabajadores de ONGs que desarrollen proyectos de cooperación al desarrollo y precisen de conocimientos técnicos que permitan la integración de aspectos medioambientales en sus proyectos.

Este curso también se ofrecerá a estudiantes universitarios (UPM y Alianza EELISA) que quieran ampliar sus conocimientos y conocer de primera mano el trabajo desarrollado por los Técnicos de las ONGs.

Community	Green Planet		
Coordinator	silvia.merino@upm.es	ECTS	
Kind of activity	Course / Seminar		
Principal SDG	SDG15 - Life on Land	Others SDG	
Starting date	2021-01-01	Ending date	2021-12-31
Target group	master   bachelor	Teaching mode	Synchronous remote
Link	<a href="https://community.eelisa.eu/?post_type=eelisa_activity&amp;p=1257">https://community.eelisa.eu/?post_type=eelisa_activity&amp;p=1257</a>		



## BEEP – Biology for human space exploration (Seasonal School)

### Description

Young People in European Forest (YPEF) es un concurso internacional destinado a estudiantes de entre 15 y 19 años que se celebrará en Ucrania en septiembre de 2022.

Para participar es necesario primero generar un concurso nacional del que saldrá el equipo ganador que acuda a la final en Ucrania. La preparación del concurso, los materiales necesarios y la dinamización de los equipos de jóvenes estudiantes (15-19 años) participantes correría a cargo de profesores de la ESTI Montes, Forestal y del Medio Natural y de alumnos UPM, que serían los verdaderos protagonistas.

Community	Green Planet		
Coordinator	silvia.merino@upm.es	ECTS	
Kind of activity	Course / Seminar		
Principal SDG	SDG15 - Life on Land	Others SDG	
Starting date	2022-09-01	Ending date	2022-09-30
Target group	master   bachelor	Teaching mode	Hybrid
Link	<a href="https://community.eelisa.eu/?post_type=eelisa_activity&amp;p=1258">https://community.eelisa.eu/?post_type=eelisa_activity&amp;p=1258</a>		



## Business Model Workshop @FAU

### Description

This activity offers students an opportunity to gain knowledge in a practical way. It is a face-to-face activity and an active discussion is expected from the participants in order to acquire knowledge that can have a professional impact. It is expected to promote the cultivation of legumes as food production in a more sustainable way with the environment. This would imply a lesser use of chemical fertilizers that pollute aquifers and produce greenhouse gases.

Community	Sustainable Food Production (SFP)		
Coordinator	luis.rey@upm.es	ECTS	
Kind of activity	Course / Seminar		
Principal SDG	SDG15 - Life on Land	Others SDG	SDG 2 - Zero Hunger   SDG 4 - Quality Education   SDG 6 - Clean Water & Sanitation
Starting date	2022-11-28	Ending date	2022-11-28
Target group	all	Teaching mode	In person
Link	<a href="https://community.eelisa.eu/activities/nodulated-legumes-a-tool-for-sustainable-food-production/">https://community.eelisa.eu/activities/nodulated-legumes-a-tool-for-sustainable-food-production/</a>		



## 2nd Erlangen Symposium of Women in Science with travel awards for EELISA guests

### Description

The seminar will cover several applications of Artificial Intelligence (AI), mainly Deep Learning, in Remote Sensing, with a focus on subjects related to change detection, multitemporal analysis, multimodal information retrieval, image semantic segmentation. These applications are, in general, used for land cover monitoring, surveillance, and resource management. Considering the technological development of Earth Observation sensors and the increase in data variability and volume, the scope of the seminar is to show the importance of Earth Observation and AI techniques in dealing with environmental issues, while raising awareness of the benefits of analyzing multimodal data.

Community	Green Planet		
Coordinator	alicia.palacios@upm.es	ECTS	
Kind of activity	Course / Seminar		
Principal SDG	SDG15 - Life on Land	Others SDG	SDG 4 - Quality Education
Starting date	2021-01-01	Ending date	2021-12-31
Target group	master   bachelor	Teaching mode	Synchronous remote
Link	<a href="https://community.eelisa.eu/?post_type=eelisa_activity&amp;p=1252">https://community.eelisa.eu/?post_type=eelisa_activity&amp;p=1252</a>		



## International Summer School "Cyberspace Security and Mobile Network Technologies" at UPM

### Description

Artificial Intelligence based environmental monitoring technologies, ranging from wildfire detection systems to fish tracking approaches will be described in the seminar. Remote sensing based techniques and inference depending on in-situ sensors will be explained. Prof. Anamaria Radoi (UPB) and Prof. Behçet Uğur Töreyn (İTÜ) will deliver the seminar.

Deliverables: Attendees will acquire knowledge about the current status of AI based environmental monitoring systems.

Community	Green Planet		
Coordinator	alicia.palacios@upm.es	ECTS	
Kind of activity	Course / Seminar		
Principal SDG	SDG15 - Life on Land	Others SDG	SDG 4 - Quality Education
Starting date	2021-01-01	Ending date	2021-12-31
Target group	master   bachelor	Teaching mode	Synchronous remote
Link	<a href="https://community.eelisa.eu/?post_type=eelisa_activity&amp;p=1255">https://community.eelisa.eu/?post_type=eelisa_activity&amp;p=1255</a>		



## MERGING SENSORS AND ADVANCED MATERIALS: Young researchers' perspective

### Description

A detailed description of the freshwater fish community at a given water body will be provided. A map (shp format) showing the sampled network and the different units with different fish communities will be included.

Deliverables: Description of the recommended profile (student or graduate): zoology, mathematics, geographic information systems.

Required materials: Diving gear provided by the Hidrobiología Research Group (UPM)

Community	WATER in an era of change		
Coordinator	carlos.alonso@upm.es	ECTS	
Kind of activity	Course / Seminar		
Principal SDG	SDG15 - Life on Land	Others SDG	SDG 6 - Clean Water & Sanitation
Starting date	2021-01-01	Ending date	2021-12-31
Target group	master   bachelor	Teaching mode	Hybrid
Link	<a href="https://community.eelisa.eu/activities/freshwater-fish-community-maps/">https://community.eelisa.eu/activities/freshwater-fish-community-maps/</a>		



## Summer School Cybersecurity- A multidisciplinary perspective in Pisa

### Description

Determination of the ecological integrity of river-type water bodies through the design of indicators, data collection and analysis. The student will collect at a river/stream reach samples of several biological quality elements (at least two from fish, macroinvertebrates and macrophytes) according to the requirements of the Water Framework Directive (WFD). Samples will be collected from a previously designed water body, including streams, rivers, canals, urban lakes/ponds, reservoirs and lakes. The samples will be analyzed in the laboratory to provide the metrics needed for the assessment. A report showing the procedure and the results (ecological status for natural water bodies, or ecological potential for heavily modified water bodies) of the assessment will be delivered.

A field trip will be organized to a previously designed reach of a water body. Students will be provided with sampling materials (surber, diving gear, electrofishers, etc.), and samples will be collected. Taxa determination and metric calculation will be done at the laboratory, after a short lecture on the identification tools and criteria.

Reference conditions will be given for the calculated metrics according to the Water Framework Directive criteria. Students will need to write a brief report on the methods, calculations and results of the assessment of the ecological status/potential of the studied water body.

All the activities will take place face-to-face outdoors and in the laboratory. Previously, a shared on-line briefing of the introduction lectures will be held at UPM and Ecole des Ponts ParisTech, simultaneously. Final results will be presented at a final on-line shared meeting at UPM and Ecole des Ponts ParisTech.

Community	WATER in an era of change		
Coordinator	carlos.alonso@upm.es	ECTS	
Kind of activity	Course / Seminar		
Principal SDG	SDG15 - Life on Land	Others SDG	SDG 6 - Clean Water & Sanitation
Starting date	2021-01-01	Ending date	2021-12-31
Target group	master   bachelor	Teaching mode	In person
Link	<a href="https://community.eelisa.eu/activities/ecological-integrity-of-streams-and-lakes/">https://community.eelisa.eu/activities/ecological-integrity-of-streams-and-lakes/</a>		