

# ***“Global and long-term effects of nitrogen on ecosystems”***

## **NecoSchool**

International training school on the effects of Nitrogen on Air Quality, Ecosystems and Biodiversity  
15 – 26 May 2017 | Faculdade de Ciências da Universidade de Lisboa, Portugal

<b>Organization:</b>	<b>NitroPortugal</b>
<b>Co-organization:</b>	eLTER, ILTER Nitrogen Initiative, INMS, LTsERmontado
<b>Coordination:</b>	Cristina Branquinho and Pedro Pinho   <a href="mailto:cmbranquinho@fc.ul.pt">cmbranquinho@fc.ul.pt</a> and <a href="mailto:ppinho@fc.ul.pt">ppinho@fc.ul.pt</a>
<b>Host:</b>	University of Lisbon
<b>Scientific Commission:</b>	Cláudia Cordovil, Mark Sutton, Tommy Dalgaard, Ulli Dragosits, Hideaki Shibata, Margarida Santos Reis
<b>Organizing Commission:</b>	Helena Serrano, Teresa Dias, Paula Matos, Margarida Santos Reis, Pedro Pinho, Cristina Branquinho



The **Centre for Ecology, Evolution and Environmental Changes, Faculty of Sciences, University of Lisbon**, is organizing a two-week international training school on the effects of atmospheric nitrogen (N) on air quality, ecosystems and biodiversity. The course entitled “Global and long-term effects of nitrogen on ecosystems” is open to PhD students and early career postdoctoral researchers of the University of Lisbon (funded by **H2020 NitroPortugal** project). As the Portuguese example is relevant to other Mediterranean countries and to other long-term ecological research sites, this training school will be open to a wider audience (such as the **International Long-Term Ecological Research Network**, ILTER). The school will provide training in a holistic approach of key aspects related to N issues under the WAGES concept (nitrogen threats to Water, Air, Greenhouse balance, Ecosystems and Soils<sup>1</sup>), with a long-term perspective. The programme will link science to practice, research to environmental management needs and training of decision makers. Theoretical lectures will be complemented with detailed case studies, short practical training sessions on specific techniques and four days of field work. Students will be exposed to tools for research and management of N emissions and effects on the environment. Available existing data from the Long Term Ecological Research (LTER) network will also be used to critically assess the impact of N deposition on Mediterranean ecosystems. The field work and many practical examples will be based on LTsERmontado, a network of sites devoted to the long-term study of this Mediterranean savannah-like ecosystem which has been shaped by human activities for millennia.

<sup>1</sup> The European Nitrogen Assessment. Sources, effects and policy perspectives. <http://www.nine-esf.org/ENA>

The montado system provides an example of a semi-natural ecosystem where the provision of multiple ecosystem services co-exists with high levels of biodiversity, and where N deposition is a potential threat for many of these ecosystem services.

- Trainers:** Experts from NitroPortugal project from Denmark, Portugal and the United Kingdom. Other experts from INMS (USA and Japan) and from ILTER
- Audience:** The Training School will welcome persons willing or already engaged in activities related to the effects of nitrogen on ecosystems and long-term ecological studies.
- FCUL and ISA:** 20 grants (supporting expenses), will be available in a competitive call from NitroPortugal project for FCUL and ISA's PhD students and early career PostDoctoral researchers.
- Other students:** 20 places will be available for other students/researchers on the basis of a fee (to be defined). This covers tuitions fees, materials during the course, field excursion travels, lodging and food during the 4 days' field travel and insurance.
- How to apply:** to be defined.

