**Transfer parameters in Mediterranean ecosystems**

**\*J. Guillén**

*LARUEX, Dpt. Applied Physics, Fac. Veterinary Sciences, University of Extremadura, Avda. Universidad, s/n, 10003, Cáceres, Spain*

\* *e-mail: fguillen@gmail.com corresponding/presenting author*

Transfer parameters are key variables that play a significant role in the development of mathematical models for the transfer of radionuclides in the environment, which are essential in the management of radiological events and emergencies. These parameters are usually defined as the ratio between activity concentrations in the receptor compartment (plant, tissue, animal, etc.) and in the media (soil, water, …). This simple concept in appearance, present some unexpected complexities and difficulties, there is no universal agreement on nomenclature or the definition of the extent of media to be considered, i.e. soil. Additionally, transfer parameters are highly dependent of the environmental and climatic conditions, which can be observed in the huge variability of their values, up to seven orders of magnitude for some radionuclides. International compilations of transfer parameters also present a geographical bias, reporting data mainly from temperate ecosystems. There is a certain lack of data for Mediterranean climate areas, which present great variation over the year in temperature or precipitation, among others. In this work, comparison between transfer parameter data reported from Mediterranean ecosystems and temperate ones will be carried out.

Acknowledgements

This study was partially funded by the agreement between Consejería de Agricultura, Ganadería y Desarrollo Sostenible de la Junta de Extremadura and the University of Extremadura “Realización de

actividades relativas a la protección radiológica ambiental, a la vigilancia de las emisiones industriales y al mantenimiento de la red de medición de calidad del cielo nocturno y contaminación lumínica en Extremadura. Anualidades 2024-2027”.