Date of the CVA	26/11/2018

Section A. PERSONAL DATA

Name and Surname	Andrew Kowalski			
DNI/NIE/Passport			Age	51
Researcher's identification number	Researcher ID	A-7515-2008		
	Scopus Author ID			
	ORCID	0000-0001-9777-9708		

A.1. Current professional situation

Institution	Universidad de Granada			
Dpt. / Centre	Departamento de Física Aplicada / Facultad de Ciencias			
Address	Avenida Fuentenueva S/N, 18071, Granada			
Phone	(+34) 958249096	Email	andyk@ugr.es	
Professional category	Catedrático de Universidad		Start date	2017
UNESCO spec. code	250908 - Micrometeorology			
Keywords	Meteorology; Hydrology			

A.2. Academic education (Degrees, institutions, dates)

Bachelor/Master/PhD	University	Year
Atmospheric Science	Oregon State University	1996
Masters in Atmospheric Science	Oregon State University	1993
Electrical Engineer	Tufts University	1988

A.3. General quality indicators of scientific production

As of November 2018:

- Sexenios de investigación: 3
- Theses supervised in the last 10 years: 4
- Total citations: 12752according to Google Scholar; 7888 according to Researcher ID (Thomson Reuters)
- Average citations/year in the last 5 years: 520
- H-Index: 27

Section B. SUMMARY OF THE CURRICULUM

Dr. Andrew S. Kowalski is a full professor of applied physics at the University of Granada, and leads a research team investigating land-atmosphere exchanges (particularly of CO2). A world-renown expert in micrometeorology, Dr. Kowalski has published 77 articles (Thomson Reuters), by whose tally his publications have received over 7800 citations, corresponding to an H-index of 27. These publications include technical treatises in atmospheric journals, applications of atmospheric physics to other disciplines including plant eco-physiology, hydrology, forestry, agriculture, and speleology, and also papers of more general interest published in Nature. Dr. Kowalski has served as principal investigator or responsible scientist for 17 scientific projects funded by Spanish and international (including European 7th Framework Program) administrations, attracting over 1 M€ of external funding to the University of Granada. Concerning training, beyond undergraduate teaching, he has mentored younger scientists throughout his career, directed 4 doctoral theses and 9 master's theses. Dr. Kowalski regularly evaluates research projects both within Spain and internationally, and habitually referees papers for such journals as Agr. Forest. Meteorol., Glob. Change. Biol., and J. Geophys. Res. He serves on the editorial board of Nature Publication's Scientific Reports.

Section C. MOST RELEVANT MERITS (ordered by typology)

C.1. Publications

1 **Scientific paper**. Ana López Ballesteros; et al. 2018. Can land degradation drive differences in the C exchange of two similar semiarid ecosystems? Biogeosciences. Copernicus. 15-1, pp.263-278.

2 **Scientific paper**. C. J. R. López; et al. 2018. From microhabitat to ecosystem: identifying the biophysical factors controlling soil CO2 dynamics in a karst shrubland European Journal of Soil Science. 69, pp.1018-1029.

3 **Scientific paper**. C. Rebmann et al.2018. ICOS eddy covariance flux-station setup: a review International Agrophysics. 32, pp.471-494.

4 **Scientific paper**. F. J. Meza; et al. 2018. Soil water content effects on net ecosystem CO2 and actual evapotranspiration in a Mediterranean semiarid savanna of Central Chile Scientific Reports. Nature. 8, pp.8570.

5 **Scientific paper**. Óscar Pérez-Priego; et al. 2017. Evaluation of eddy covariance latent heat fluxes with independent lysimeter and sapflow estimates in a Mediterranean savannah ecosystem Agricultural and Forest Meteorology. Elsevier. 236, pp.87-99.

6 **Scientific paper**. Chamizo, S.; et al. 2017. Net ecosystem CO2 exchange in an irrigated olive orchard of SE Spain: Influence of weed cover Agriculture, Ecosystems and Environment. Elsevier. 239, pp.51-61.

7 **Scientific paper**. Ana López-Ballesteros; et al. 2017. Subterranean ventilation of allochthonous CO2 governs net CO2 exchange in a semiarid Mediterranean grassland Agricultural and Forest Meteorology. Elsevier. 234-235, pp.115-126.

8 **Scientific paper**. Andrew S. Kowalski. 2017. The boundary condition for vertical velocity and its interdependence with surface gas exchange Atmospheric Chemistry and Physics. Copernicus Publications. 17-13, pp.8177-8187.

9 **Scientific paper**. López-Ballesteros, A.; et al. 2016. Enhancement of the net CO2 release of a semiarid grassland in SE Spain by rain pulses Journal of Geophysical Research: Biogeoscience. American Geophysical Union. 121-1, pp.52-66.

10 **Scientific paper**. López-Ballesteros, A.; et al. 2016. Subterranean ventilation of allochthonous CO2 governs net CO2 exchange in a semiarid Mediterranean grassland Agricultural and Forest Meteorology. 234, pp.115-126.

11 **Scientific paper**. Serrano-Ortiz, Penelope; et al. 2016. Surface-Parallel Sensor Orientation for Assessing Energy Balance Components on Mountain Slopes Boundary-Layer Meteorology. 158, pp.489-499.

12 **Scientific paper**. Sánchez-Cañete, E. P.; et al. 2016. Winds induce CO2 exchange with the atmosphere and vadose zone transport in a karstic ecosystem Journal of Geophysical Research: Biogeoscience. American Geophysical Union. 121-8, pp.2049-2063.

13 **Scientific paper**. Pérez-Priego, Ó; et al. 2015. Analysing uncertainties in the calculation of fluxes using whole-plant chambers: random and systematic errors Plant and Soil. Springer. 393-1, pp.229-244.

14 **Scientific paper**. Serrano-Ortiz, Penelope; et al. 2015. Seasonality of net carbon exchanges of Mediterranean ecosystems across an altitudinal gradient Journal of Arid Environments. 115, pp.1-9. ISSN 0140-1963.

15 **Scientific paper**. Pérez-Priego, Ó; et al. 2014. Aboveground respiratory CO2 effluxes from olive trees (Olea europaea L.) Agroforestry Systems. 88-2, pp.245-255.

16 **Scientific paper**. Sánchez-Cañete, E. P.; Kowalski, A. S.2014. Comment on “Using the gradient method to determine soil gas flux: Areview” by M. Maier and H. Schack-Kirchner Agricultural and Forest Meteorology. 197, pp.254-255.

17 **Scientific paper**. Sánchez-Cañete, E. P.; et al. 2013. Cave ventilation is influenced by variations in the CO2-dependent virtual temperature International Journal of Speleology. 42-1, pp.1-8.

C.2. Participation in R&D and Innovation projects

1 Estudio de los balances de carbono y agua en ecosistemas gestionados para su adaptación al cambio climático (CGL2017-83538-C3-1-R) (Universidad de Granada). 01/01/2018-31/12/2020. 121.000 €.

2 Hacia el balance integrado de gases de efecto invernadero en ecosistemas naciolnales de alto impacto social y económico (CGL2014-52838-C2-1-R) Ministerio de Economía y Competitividad. Kowalski, A. S.(Universidad de Granada). 01/2015-12/2017. 163.350 €.

3 RNM-7186, Balance de carbono en el olivar: efecto de la presencia de la cubierta vegetal (CARBOLIVAR) Consejería de Economía, Innovación y Ciencia (Junta de Andalucía). Kowalski-, Andrew Stephen. (Universidad de Granada). 01/2013-12/2016. 169.184,94 €.

4 CGL2011-15276-E, Medidas continuas de perfiles de CO2 en suelos de ecosistemas de la red española de torres de flujos Kowalski-, Andrew Stephen. (Estación Experimental de Zonas Áridas). 01/2013-12/2014. 19.000 €.

C.3. Participation in R&D and Innovation contracts

C.4. Patents