CV Date	16/11/2022

Part A. PERSONAL INFORMATION

First Name	Carlos M.		
Family Name	Fernández Marcos		
Sex	Male	Date of Birth	11/01/1964
ID number Social Security, Passport	36053615B		
URL Web	http://www.unex.es/investigacion/grupos/lobo		
Email Address	cfernan@unex.es		
Open Researcher and Contributor ID (ORCID)	0000-0003-2278-7118		

A.1. Current position

Job Title	Catedrático de Universidad		
Starting date	2016		
Institution	Universidad de Extremadura		
Department / Centre	Departamento de Química Orgánica e Inorgánica / Facultad de Veterinaria		
Country	Spain	Phone Number	(34) 927257158
Keywords	Bioorganic; Methodology; Heterocycles; Synthesis of active biological compounds		

A.3. Education

Degree/Master/PhD	University / Country	Year
Doctorado en Química. Programa Química de compuestos orgánicos de interés farmacológico	Universidad de Santiago de Compostela / Spain	1991
Licenciado en Química	Universidad de Santiago de Compostela	1987

Part B. CV SUMMARY

Carlos F. Marcos holds a Ph.D. in Organic Chemistry from the University of Santiago of Compostela, where he specialized in chemistry of heterocycles and total synthesis of natural products. He completed his training on the chemistry of the organometallic compounds at the University of Milan and at the Imperial College London, where he was awarded with a grant of the Human Capital and Mobility programme of the European Community.

In 1996 he joined the University of Extremadura, where he started a line of research on new sulfur heterocyclic materials, in collaboration with professors Charles Rees (Imperial College) and Tomás Torroba (UEx). From 2002, he leads a research group involved in the development of new synthetic methodologies. Dr. Fernández Marcos has participated in more than 25 research projects funded in international, national and regional competitive calls, eight of them as principal investigator. Throughout his career, he has supervised many research studies and has more than 50 publications indexed in frontline scientific journals. He has also made several stays as visiting professor in prestigious American and European research centres. From 2016, it holds a position as Full Professor at the University of Extremadura.

In recent years his research has focused in the chemistry of isocyanides, and especially their use to develop new tandem and multi-component processes. These synthetic strategies have proved to be a very advantageous approach to obtain organic materials with new properties, as well as compounds with biomedical interest. For example, the application of these methodologies has allowed, in collaboration with the of Nuclear Medicine Service of the Hospital Infanta Cristina of Badajoz, to develop new imaging agents for the diagnosis of Alzheimer's disease.

Part C. RELEVANT ACCOMPLISHMENTS

C.1. Most important publications in national or international peer-reviewed journals, books and conferences

AC: corresponding author. (nº x / nº y): position / total authors. If applicable, indicate the number of citations

1 **Scientific paper**. A. Pajuelo; S. Sánchez; T. Pérez-Palacios; D. Caballero; J. Díaz; T. Antequera; C. F. Marcos (AC). (7/7). 2022. 1H NMR to Analyse the Lipid Profile in the Glyceride Fraction of Different Categories of Iberian Dry-Cured Hams Food Chemistry. Elsevier. 383, pp.132371--132380. ISSN 0308-8146.

2 **Scientific paper**. J. L. Ramiro; A. G. Neo; C. F. Marcos (AC). (3/3). 2022. Synthesis of Imidazolocoumarins by the Amide-Directed Oxidative Cyclisation of Enol-Ugi Derivatives Organic & Biomolecular Chemistry. Royal Society of Chemistry (RSC). ISSN 1477-0520.

3 **Scientific paper**. Bornadiego, Ana; Díaz, Jesús; Marcos, Carlos F. (AC). (3/3). 2019. Tandem synthesis of polycyclic isoindoles Journal of Organic Chemistry. 84-11, pp.7426-7433.

4 **Scientific paper**. Neo, Ana G.; Marcos, Carlos F. (AC). (2/2). 2018. Selective Synthesis of 3-Substituted Pyrrolidinones by Enol-Passerini and Anomalous Enol-Passerini Condensations Organic Letters. 20-13, pp.3875-3878. ISSN 1523-7060.

5 **Scientific paper**. Bornadiego, Ana; Diaz, Jesus; F. Marcos, Carlos (AC). (3/3). 2015. Regioselective tandem [4+1]-[4+2] synthesis of amino-substituted dihydroxanthones and xanthones The Journal of Organic Chemistry. ACS. 80-12, pp.6165-6172. ISSN 0022-3263. https://doi.org/10.1021/acs.joc.5b00658

6 **Scientific paper**. Neo, Ana G.; López-García, Lucía; Marcos, Carlos F. (AC). (3/3). 2014. Allylic amination of Passerini adducts. Application to the selective synthesis of chromone-substituted ?-and ?-amino acid peptidic and retropeptidic units RSC Advances. RSC. 4-75, pp.40044-40053. ISSN 2046-2069. https://doi.org/10.1039/c4ra05719h

7 **Scientific paper**. Bornadiego, A.; Díaz, J.; Marcos, C. F. (AC). (3/3). 2014. Synthesis of 4-Aminoxanthones by an Uncatalyzed, Multicomponent Reaction Advanced Synthesis & Catalysis. Wiley. 356-4, pp.718-722. ISSN 1615-4169. https://doi.org/10.1002/adsc.201300750

8 **Scientific paper**. Neo, Ana G.; Bornadiego, A.; Díaz, Jesús; Marcaccini, Stefano; Marcos, Carlos F. (AC). (5/5). 2013. Elusive 2-aminofuran Diels-Alder substrates for a straightforward synthesis of polysubstituted anilines Organic & Biomolecular Chemistry. RSC. 11-38, pp.6546-6555. https://doi.org/10.1039/c3ob41411f

9 **Scientific paper**. Castellano, T. G.; Neo, A. G.; Marcaccini, S.; Marcos, C. F. (AC). (4/4). 2012. Enols as feasible Acid components in the ugi condensation Organic Letters. American Chemical Society. 14-24, pp.6218-6221.

10 **Scientific paper**. Marcaccini, Stefano; Neo, Ana G.; Marcos, Carlos F. (AC). (3/3). 2009. Sequential Five-Component Synthesis of Spiropyrrolidinochromanones JOURNAL OF ORGANIC CHEMISTRY. ACS. 74-17, pp.6888-6890. ISSN 0022-3263.

11 **Scientific paper**. Carrillo, Rosa M.; Neo, Ana G.; Lopez-Garcia, Lucia; Marcaccini, Stefano; Marcos, Carlos F. (AC). (5/5). 2006. Zinc catalysed ester solvolysis. Application to the synthesis of tartronic acid derivatives GREEN CHEMISTRY. RSC. 8-9, pp.787-789. ISSN 1463-9262.

12 **Scientific paper**. Basurto, S; Garcia, S; Neo, AG; et al; Marcos, CF; de la Fuente, MR. (5/5). 2005. Indene and pseudoazulene discotic liquid crystals: A synthetic and structural study CHEMISTRY-A EUROPEAN JOURNAL. Wiley. 11-18, pp.5362-5376. ISSN 0947-6539.

C.3. Research projects and contracts

1 **Project**. Diseño de intercalantes fluorescentes de ácidos nucleicos con aplicación en el transporte intracelular de ADN y en el estudio de enfermedades raras mitocondriales. Carlos F. Marcos. (Universidad de Extremadura). 03/06/2017-02/06/2020. 146.578,3 €.

2 **Project**. PI081234, Desarrollo de radiofármacos para el diagnóstico precoz de la enfermedad de Alzheimer mediante tomografía de emisión de positrones (PET). Ministerio de Sanidad - Instituto de Salud Carlos III. Fernández Marcos, Carlos. (Universidad de Extremadura y Hospital Infanta Cristina de Badajoz). From 01/01/2009. 132.616 €.

3 **Project**. SCSS0720, Desarrollo de radiofármacos para el diagnóstico precoz de la enfermedad de Alzheimer mediante tomografía de emisión de positrones (PET). Consejería de Consejería de Sanidad y Dependencia de la Junta de Extremadura. Fernández Marcos, Carlos. (Universidad de Extremadura). From 01/01/2008. 14.000 €.

4 **Project**. PRI07A032, Síntesis multicomponente de potenciales inhibidores de proteína quinasas y fosfodiesterasas. Consejería de Economía, Comercio e Innovación de la Junta de Extremadura y Fondo Social Europeo. Fernández Marcos, Carlos. (Universidad de Extremadura). From 14/09/2007. 24.971 €.

5 **Project**. SCSS0663, Desarrollo de radiofármacos para el diagnóstico precoz de la enfermedad de Alzheimer mediante tomografía de emisión de positrones (PET). Consejería de Consejería de Sanidad y Dependencia de la Junta de Extremadura. Fernández Marcos, Carlos. (Universidad de Extremadura). From 17/12/2006. 11.523,86 €.

6 **Project**. 2PR04A003, Síntesis Enfocada a la Generación de Diversidad para el Descubrimiento de Nuevas Dianas Terapéuticas. Consejería de Educación Ciencia y Tecnología de la Junta de Extremadura y Fondo Social Europeo. Fernández Marcos, Carlos. (Universidad de Extremadura). From 10/11/2004. 33.440 €.

7 **Project**. PI021150, Desarrollo de compuestos inhibidores de STAT-6 y estudio de su aplicación en asma. MINISTERIO DE SANIDAD Y CONSUMO. Zamorano-Quirantes, José. (Hospital San Pedro de Alcántara y Universidad de Extremadura). From 01/01/2003. 106.950 €.