

## Part A. PERSONAL INFORMATION

CV date

25/09/2018

First and Family name	ROSA MARÍA ALONSO		
Social Security, Passport, ID number	22.723.801P	Age	
Researcher numbers	Researcher ID		
	Orcid code	0000-0001-9046-6602	

### A.1. Current position

Name of University/Institution	UNIVERSITY OF THE BASQUE COUNTRY (UPVEHU)		
Department	ANALYTICAL CHEMISTRY		
Address and Country	BARRIO DE SARRIENA,S/N		
Phone number	34 946012686	E-mail	<a href="mailto:rosamaria.alonso@ehu.eus">rosamaria.alonso@ehu.eus</a>
Current position	PROFESSOR	From	1996
Espec. cód. UNESCO			
Palabras clave	Metabolomics, chromatography, mass spectrometry,		

### A.2. Education

PhD	University	Year
ANALYTICAL CHEMISTRY	UNIVERSITY OF THE BASQUE COUNTRY (UPVEHU)	1983

### A.3. JCR articles, h Index, thesis supervised...

Rosa M. Alonso has 6 recognized research six-year-terms. The last one was given in 2017. In the last 10 years, she has been the supervisor of 10 Ph.D.

The researcher has published more than 145 scientific articles with a percentage higher than 50% in scientific journals with an impact factor inside the first quartile of analytical chemistry field.

Her publications have 2261 cites with a mean value of 147,2 in the last 10 years..She has an h index of 26 according to Web of Science and of 29 according to Scopus.

She is a reviewer of several scientific journals and a member of the Advisory Board of the journals: Current Chromatography and Separations.

## Part B. CV SUMMARY (max. 3500 characters, including spaces)

Rosa M. Alonso is a professor of Analytical Chemistry Department in the University of the Basque Country (UPV/EHU) from 1996. From 1991 I am the leader of the FARMARTEM research group. This group was classified as consolidated research group by the UPV/EHU (2003-2009) and the Basque Country Government from 2010. This research group together with Spectroscopy and Applied Pharmacokinetics and Pharmacodynamics constituted the Teaching and Research Unit (UFI 11/23) called New Technologies in Chemistry and Pharmacology Applied to Health supported by the UPV/EHU.

The aim of FARMARTEM research group is the development of analytical methodologies applied to metabolomics, pharmaceutical, environmental fields, conservation of art heritage and documents; and art works dating. Separation analytical techniques are used preferably in the different application fields of the group. Liquid chromatography and gas chromatography coupled to mass spectrometry are the most employed ones. The group research has also focused to develop sample treatment procedures for the different matrixes studied as biological fluids, environmental samples and documents.

The research carried out has given rise to 148 scientific articles with a 50% of those in scientific journals with an impact factor in the first quartile of the analytical chemistry field; and 180 Congress communications, some of them as invited speaker.

The research group has established collaborations with other national and international research groups inside its field, which has improved the formation of our Ph.D. students.

I have taken part in 47 competitive research projects (35 of them as leader), 8 contracts with chemical and pharmaceutical companies and 23 projects for acquisition of equipment facilities. I have been the supervisor of 20 doctoral thesis, 34 final Master degree projects y 9 final degree projects. I am also reviewer of scientific journals and member of the Advisory Board of the journals: Current Chromatography and Separations: and reviewer of research projects of ANEP.

With respect to my teaching activities, I have 6 five-year-terms and I have obtained the excellent qualification in the DOCENTIAZ teaching activity evaluation program of the University of the Basque Country (UPV/EHU). Period of evaluation: 2010/11-2014/15. Nowadays, I teach my lectures in the Chemistry degree and in Forensic Analysis Master in Sciences. From the 2016/17 academic course, I am the responsible of postgraduate degree titled "Chemistry and Genetics in Nutrition and Sport. Moreover, I am the coordinator of student mobility programs (Erasmus+, Tassep, Sicue) of Chemistry degree.

## **Part C. RELEVANT MERITS**

### **C.1. Publications (including books)**

1. Leire Ruiz-Rubio , María Luz Alonso, Leyre Pérez-Álvarez, Rosa Maria Alonso, Jose Luis Vilas, Vitaliy V. Khutoryanskiy \*Formulation of Carbopol®/poly(2-ethyl-2-oxazoline)s mucoadhesive tablets for buccal delivery of hydrocortisone", Polymers 2018, 10, 175; doi:10.3390/polym10020175.

2.. Albóniga, O.E., Alonso, M.L., Blanco, M.E., González, O, Alonso, R.M., Campanero, M.A., Quantitative determination of dobutamine in newborn pig plasma samples by HPLC–MS/MS Journal of Pharmaceutical and Biomedical Analysis. 145, 178-185 (2017). DOI: 10.1016/j.jpba.2017.06.050.

3. Blanco ME, González O, Albóniga OE, Alonso ML, Alonso RM , Metabolomic analysis for the study of maturation in pediatrics: Effect of confounding factors in a pilot study., Electrophoresis. 38(18):2323-2330 (2017).

4. I. San Román, A. Galdames, M.L. Alonso, L. Bartolomé, J.L. Vilas, R.M. Alonso. Effect of coating on the environmental applications of zero valent iron nanoparticles: lindane case, Science of the Total Environment, 565, 795-803 (2016) DOI:<http://dx.doi.org/10.1016/j.scitotenv.2016.04.034>..

5 143. M. L. Alonso. E. San Sebastian, P. Vitoria, L. Sanfelices, R.M. Alonso, "Structure of the  $\beta$ -cyclodextrin: acetamiprid insecticide inclusion complex in solution and solid state" , J.Inclusion Phenomena and Macrocyclic Chemistry, 86,103–110 (2016). DOI: 10.1007/s10847-016-0645-9.

6 I. San Román, L. Bartolomé, M.L. Alonso, R.M. Alonso, M. Ezcurra "DATINK pilot study: A powerful methodology for ballpoint pen ink dating in questioned documents", Analytica Chimica Acta, 892, 105-114 (2015). <http://dx.doi.org/10.1016/j.aca.2015.08.038>.

7 M. E. Blanco, O. González, E. Rico, E. Encinas, E. Suárez, R. M. Alonso "Determination of fentanyl in newborn pig plasma and cerebrospinal fluid samples by LC-MS/MS" Drug Testing and Analysis, 7(9), 804-811 (2015), ([www.drugtestinganalysis.com](http://www.drugtestinganalysis.com)) DOI 10.1002/dta.1778).

8 Estitxu Rico, Oskar González, María Encarnación Blanco, Rosa María Alonso, Evaluation of human plasma sample preparation protocols for untargeted metabolic profiles analyzed by UPLC-TOF-MS, Analytical and Bioanalytical Chemistry, 406, 7641-7652 (2014). DOI 10.1007/s00216-014-8212-y.

9 Oskar González, María Encarnación Blanco, Gorka Iriarte, Luis Bartolomé, M. Itxaso Maguregui, Rosa Maria Alonso , Bioanalytical chromatographic method validation according to current regulations, with a special focus on the non-well defined parameters limit of quantification, robustness and matrix effect Journal of Chromatography A, 1353,10–27 (2014). <http://dx.doi.org/10.1016/j.chroma.2014.03.077>

10. I. San Román, M.L. Alonso, L. Bartolomé, A. Galdames, E. Goiti, M. Ocejo, M. Moragues, R.M. Alonso and J.L. Vilas, Relevance study of bare and coated zero valent iron nanoparticles for lindane degradation from its by-product monitorization, Chemosphere, 93(7), 1324-1332. (2013). DOI: <http://dx.doi.org/10.1016/j.chemosphere.2013.07.05> .

## **C.2. Research projects and grants (Last ten years)**

1. Nuevos Gases Dieléctricos para Equipos de Media Tensión” (GADEM) (Universidad del País Vasco). 01/01/2017-31/12/2018. 148.000 €.

2 Metabolómica y dosificación personalizada de fármacos. Aplicación en la población pediátrica mediante modelos animales (CTQ2013-46179-R). Rosa M. Alonso. (Universidad del País Vasco). 01/01/2014-30/06/2017. 68.000€.

3 Metabolómica Aplicada a la Identificación de Biomarcadores de Maduración de Procesos de Eliminación en un Modelo Animal de Población Pediátrica” (PPM12/06) Rosa M. Alonso. (Universidad del País Vasco). 01/12/2012-01/12/2013. 15.000 €.

4 Microencapsulación de Bioatrayentes e Insecticidas para la Fabricación de Cebos Específicos en el Control de Dípteros. Estudios de Liberación Sostenida (BIOATME) Rosa M. Alonso. (Universidad del País Vasco). 01/12/2013-01/06/2013. 27.556 €.

5 Nuevos avances cromatográficos aplicados al control del síndrome metabólico” MICINN. Rosa M<sup>o</sup> Alonso Rojas. From 01/2010. 60.000 €.

## **C.3. Contracts (Last ten years).**

1 “DyAppHTM. Aplicación de nuevas tecnologías biónicas de alto rendimiento para la mejora del desarrollo de medicamentos genéricos”(código 16109). Dynakin, S.L. 01/12/2014-P1Y. 16.500 €.

2 “Análisis y estudio de estabilidad de compuestos para el control de insectos DTS-OABE, S.L. ROSA MARÍA ALONSO. 01/04/2014-P9M. 8.000 €.

3 “Identificación y valoración de propiedades farmacocinéticas de candidatos terapéuticos en inflamación, cáncer de páncreas y mama. Part. II (código 2013.0090) Dynakin, S.L. 03/03/2014-P1Y. 56.125 €.

4 Identificación y valoración de propiedades farmacocinéticas de candidatos terapéuticos en inflamación, cáncer de páncreas y mama. Part. II (código 2013.0090) Dynakin, S.L. 01/03/2013-P1Y. 48.000 €.

5 “Regeneración y Eliminación de Residuos en Procesos de Fresado y Mecanizado electroquímico” (P-Proyecto10004) Industria de Turbo Propulsores, S.A. (ITP). 04/01/2010-P2Y.

## C.4. Patents

ROSA MARÍA JIMÉNEZ SANZ; ROSA MARÍA ALONSO ROJAS; JOSÉ MANUEL LAZATORRALBA; MARIA LUZ ALONSO ALONSO. P201230020. NUEVOS COMPLEJOS DE INCLUSIÓN DE PESTICIDAS, COMPOSICIONES QUE LOS CONTIENEN Y SU EMPLEO COMO PESTICIDAS Spain. Universidad del País Vasco.

## C5. Supervision of final Master and degree projects

- 34 final Master and 9 chemistry degree final projects supervised.

## C6 Member of Advisory Boards

- Scientific journals: Current Chromatography and Separations.

## C7. Evaluation Skills

- Reviewer of articles from different scientific journals
- Reviewer of research projects

## C8. Institutional responsibilities

- Responsible of Central Service of Analysis inside General Services of Research (SGIker) of UPV/EHU.. Bizkaia Campus. 2005-2010.

- President of the Commission of Chemistry Degree Study Program of UPV/EHU. September 2008-July 2010

- Member of Experimental Sciences Commission in the Quality Evaluation Agency of Basque University System (UNIQUAL). 2009- Dic. 2011.

- Equipment Facilities and Economy Vice-dean of Science and Technology Faculty. UPV/EHU. 15-01-2011-04-02-2015.

- Economy and Human Resources Vice-Dean: 05-02-2015-31-08-2018. -31-08-2018 Human Resources Vice-Dean.