

Date of the CVA

29/07/2021

Section A. PERSONAL DATA

Name and Surname	Ramón Martínez Mañez		
DNI		Age	
Researcher's identification number	Researcher ID	O-8915-2014	
	Scopus Author ID	7004153203	
	ORCID	0000-0001-5873-9674	

* Obligatorio

A.1. Current professional situation

Institution	UNIVERSITAT POLITÈCNICA DE VALÈNCIA		
Dpt. / Centre	Department of Chemistry / Interuniversity Research Institute for Molecular Recognition and Technological Development (IDM)		
Address	Camino de Vera s/n, 46022, Valencia		
Phone	(034) 963877000 - 73432	Email	
Professional category	Full Professor	Start date	2002
Keywords	Supramolecular inorganic chemistry; Materials; Biomedicine		

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

Bachelor/Master/PhD	University	Year
PhD in Chemistry	Universitat de València	1990
Degree in Chemistry	Universitat de València	1986

A.3. General quality indicators of scientific production

6-Years Research Periods: 5 (Data of last 6-years research period 2018)

Times cited: 21.433

Average citations/article: 46

h-index: 72

Sixth author with higher h index in Spain in the area "Chemistry, multidisciplinary"

Awarded with Prize Rey Jaime I of New Technologies 2018.

Section B. SUMMARY OF THE CURRICULUM

Ramón Martínez-Mañez is Full Professor in the Department of Chemistry at Universitat Politècnica de València (UPV). Since 2015 he is the Scientific Director of The Biomedical Research Networking Center in Bioengineering, Biomaterials and Nanomedicine (CIBER-BBN) created under the leadership of the Carlos III Health Institute (ISCIII). He is the Director (and promoter of creation) of the Interuniversity Research Institute for Molecular Recognition and Technological Development (IDM), from the UPV and the Universitat de València. Additionally, he has also been the promoter and is currently Coordinator of the "Joint Research Unit in Nanomedicine and Sensors" with the Hospital La Fe in Valencia and the "Joint Research Unit in Disease Mechanisms and Nanomedicine" with the Centro de Investigación Príncipe Felipe. Ramón Martínez-Mañez has published a total of 450 research articles in refereed journals, 150 of them in highly-ranked journals. In recognition to his research, he was invited in 2010 by the journal *Angewandte Chemie* for his inclusion in the section "Authors Profile". This was the first "Authors Profile" for a Spanish researcher published in this journal. He has been cited more than 19800 times (Web of Science) with an average of more than 44 citations per paper. He has an h-index of 72 (Web of Science) and has published 41 articles that have been cited more than 100 times. He leads a research group of 43 members and publishes 32 articles in average per year. He has 11 "highly cited papers" (web of Science). He is co-editor of a book, co-author of 17 book chapters and has supervised 43 PhD theses, 10 of which have obtained the UPV PhD Award. He has been coordinator of 110 projects funded by the Spanish Government, the Generalitat Valenciana, the Carlos III Health Institute and H2020. He

has been named co-Chairman (together with Prof. Thomas Wirth and the Nobel Prize Jean-Marie Lehn) of the journal ChemistryOpen and member of the International Advisory Board of the journals Chem.Asian J. and ChemPlusChem (all published by Wiley-VCH). Regarding technological transference, Ramón Martínez-Máñez holds 29 patents, 17 of them international. Four of these patents have been transferred to companies. He has participated in 45 projects in collaboration with national and international companies, being the coordinator at the UPV of 7 Retos-colaboración or INNPACTO projects. It is worth noting the project with PFIZER INC. to study the efficacy of the drug palbociclib in combination with senescence-activated pro-drugs. He is also co-founder of the spin-off Senolytic Therapeutics SL. Ramón Martínez-Máñez has participated in over 180 research conferences, with 9 plenary conferences delivered at international meetings in the last 5 years. His research has more than 100 references in local and national newspapers and TVs. He has been awarded as referee by the journal Angew. Chem. Int. Ed. for six consecutive years. In 2009 he was granted with the Award of the Academia III Milenio in Chemistry. In 2010 and 2011, he was awarded by “Valencia Idea” in the sections Energy and Environment and Nanotechnology and in 2016 he received the Research Excellence Award by the Real Sociedad Española de Química (RSEQ). Recently he has received the Award Rei Jaume I of New Technologies 2018.

Section C. MOST RELEVANT MERITS (ordered by typology)

C.1. Publications

- 1 Scientific paper.** Garrido-García, Eva María; Alfonso-Navarro, María; Díaz de Greñu-Puertas, Borja; Marcos Martínez, María Dolores; Ana M. Costero; SALVADOR GIL GRAU; Sancenón Galarza, Félix; Martínez-Máñez, Ramón. 2020. A sensitive nanosensor for the in situ detection of the cannibal drug ACS Sensors. ISSN 2379-3694.
- 2 Scientific paper.** Pla, Luis; Santiago Felipe, Sara; Tormo Mas, M.A.; Peman, Javier; Sancenón Galarza, Félix; Aznar, Elena; Martínez-Máñez, Ramón. 2020. Aptamer-Capped nanoporous anodic alumina for Staphylococcus aureus detection Sensors and Actuators B Chemical. 320. ISSN 0925-4005. DOI: 10.1016/j.snb.2020.128281.
- 3 Scientific paper.** Jiménez-Falcao, Sandra; Villalonga, Anabel; Arévalo-Villena, María; Briones-Pérez, Ana; Martínez-Máñez, Ramón; Martínez-Ruiz, Paloma; Villalonga, Reynaldo. 2020. Enzyme-controlled mesoporous nanosensor for the detection of living Saccharomyces cerevisiae Sensors and Actuators B Chemical. 303. ISSN 0925-4005. DOI: 10.1016/j.snb.2019.127197.
- 4 Scientific paper.** Lozano-Torres, Beatriz; Blandez, Juan F.; Galiana, Irene; et al; Martínez-Máñez, Ramón. 2020. Real-Time In Vivo Detection of Cellular Senescence through the Controlled Release of the NIR Fluorescent Dye Nile Blue Angewandte Chemie International Edition. 132, pp.15264-15268. ISSN 1433-7851. DOI: 10.1002/anie.202004142.
- 5 Scientific paper.** de Luis-Fernández, Beatriz; Llopis-Lorente, Antoni; Paola Rincón; et al; Martínez-Máñez, Ramón (AC). (9/9). 2019. An Interactive Model of Communication between Abiotic Nanodevices and Microorganisms Angewandte Chemie International Edition. 58. ISSN 1433-7851.
- 6 Scientific paper.** Llopis-Lorente, Antoni; García-Fernández, Alba; Murillo-Cremaes, N.; et al; Martínez-Máñez, Ramón; Sanchez, S.(8/9). 2019. Enzyme-Powered Gated Mesoporous Silica Nanomotors for On-Command Intracellular Payload Delivery ACS Nano. 13, pp.12171-12183. ISSN 1936-0851.
- 7 Scientific paper.** Ribes, Àngela; Santiago Felipe, Sara; Aviñó, Anna; Candela-Noguera, Vicente; Eritja, Ramón; Sancenón Galarza, Félix; Martínez-Máñez, Ramón; Aznar, Elena. 2018. Design of oligonucleotide-capped mesoporous silica nanoparticles for the detection of miRNA-145 by duplex and triplex formation Sensors and Actuators B Chemical. 277, pp.598-603. ISSN 0925-4005. DOI: 10.1016/j.snb.2018.09.026.

- 8 **Scientific paper.** Lozano-Torres, Beatriz; Galiana, Irene; Rovira, M.; et al; Sancenón Galarza, Félix. 2017. An OFF-ON Two-Photon Fluorescent Probe for Tracking Cell Senescence in Vivo *Journal of the American Chemical Society*. 139, pp.8808-8811. ISSN 0002-7863. DOI: 10.1021/jacs.7b04985.
- 9 **Scientific paper.** De La Torre-Paredes, Cristina; Toscani, Anita; Marín-Hernández, Cristina; et al; Sancenón Galarza, Félix. 2017. Ex Vivo Tracking of Endogenous CO with a Ruthenium(II) Complex. *Journal of the American Chemical Society*. 139, pp.18484-18487. ISSN 0002-7863.
- 10 **Scientific paper.** Llopis-Lorente, Antoni; Díez, P.; Sánchez, A.; Marcos Martínez, María Dolores; Sancenón Galarza, Félix; Martínez-Ruiz, Paloma; Villalonga, Reynaldo; Martínez-Mañez, Ramón. (8/8). 2017. Interactive models of communication at the nanoscale using nanoparticles that talk to one another *Nature Communications*. 8, pp.1-7. ISSN 2041-1723.

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

- 1 IMMUNOLOGICAL INCOMPATIBILITY AS A BASIS FOR CANCER CURING AND VACCINATION (899708) COMISION DE LAS COMUNIDADES EUROPEA. Ramón Martínez Mañez. (Universitat Politècnica de València). From 01/10/2020. 221.424,98 €.
- 2 MATERIALES POROSOS INTELIGENTES MULTIFUNCIONALES Y DPOSITIVOS ELECTRONICOS PARA LA LIBERACION DE FARMACOS, DETECCION DE DROGAS Y BIOMARCADORES Y COMUNICACION A NANOESCALA (RTI2018-100910-B-C41-AR)
- 3 AGENCIA ESTATAL DE INVESTIGACION. Ramón Martínez Mañez. (Universitat Politècnica de València). From 01/01/2019. 266.200 €.
- 4 Safety testing in the life cycle of nanotechnology-enabled medical technologies for health (814607) European Comission. From 01/10/2018. 14.588.286 €. Team member.
- 5 SISTEMAS AVANZADOS DE LIBERACION CONTROLADA (PROMETEO/2018/024) GENERALITAT VALENCIANA. Ramón Martínez Mañez. (Universitat Politècnica de València). From 01/01/2018. 317.834,12 €.
- 6 Integrated Precision Medicine Technologies Research Centre of Excellence (IPMT) (763781) European Comission. From 01/09/2017. 399.997,5 €. Principal investigator.
- 7 NANOMATERIALES INTELIGENTES, SONDAS Y DISPOSITIVOS PARA EL DESARROLLO INTEGRADO DE NUEVAS HERRAMIENTAS APLICADAS AL CAMPO BIOMEDICO (MAT2015-64139-C4-1-R) MINISTERIO DE ECONOMIA Y EMPRESA. Ramón Martínez Mañez. (Universitat Politècnica de València). From 01/01/2016. 266.200 €.
- 8 Development of the complete workflow for producing and using a novel nanomodified Ti-based alloy for additive manufacturing in special applications (685952) European Comission. Ramón Martínez Mañez. (Universitat Politècnica de València). From 01/10/2015. 225.531,25 €.
- 9 Desarrollo de materiales funcionalizados con puertas nanoscópicas para aplicaciones de liberación controlada y sensores para la detección de nitrato amónico, sulfídrico y CO (MAT2012-38429-C04-01) Ministerio de Economía, Industria y Competitividad. Ramón Martínez Mañez. (Universitat Politècnica de València). From 01/01/2013. 251.550 €.

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

- 1 APOYO TECNOLÓGICO PARA EL DESARROLLO DE NUEVOS BIOCIDAS DE LIBERACION DE ACEITES ESENCIALES CON FUNCION FUNGICIDA EN PRESENCIA DEL HONGO BOTRYTIS, STEREOUM HIRSUTUM PER. Y PHELLINUS IGNIARIUS FR DESARROLLO AGRICOLA Y MINERO, SA. Ramón Martínez Mañez. (Universitat Politècnica de València). 07/03/2018-07/09/2018. 19.000 €.
- 2 LICENSE PATENT PCT/IB2017/000222: THERAPEUTIC DERIVATES SENOLYTIC THERAPEUTICS, INC. Ramón Martínez Mañez. (Universitat Politècnica de València). 30/10/2017-28/02/2037. 8.500 €.
- 3 LICENSE PATENT P201231370: LIBERACION DE SUSTANCIAS EN CELULAS SENESCENTES SENOLYTIC THERAPEUTICS, INC. Ramón Martínez Mañez. (Universitat Politècnica de València). 28/09/2017-28/09/2032. 15.000 €.

- 4 COLABORACION PROYECTO DESARROLLO DE UNA NUEVA GAMA DE DESENGRASANTES VERDES CON LIBERACION CONTROLADA DE ACTIVOS INHIBIDORES DE LA FORMACION DE BIOFILMS SUAVIZANTES Y PLASTIFICANTES BITUMINOSOS, S.L. Ramón Martínez Mañez. (Universitat Politècnica de València). 01/03/2016-01/06/2016. 30.000 €.
- 5 ASSESS PALBOCICLIB COMBINATION EFFICACY WITH SENESENCE-ACTIVATED PRO-DRUGS PFIZER INC. Ramón Martínez Mañez. (Universitat Politècnica de València). 30/07/2015-30/07/2017. 105.489,22 €.

C.4. Patents

- 1 Elena Aznar Gimeno; Ramón Martínez Mañez; Luis Plá Blasco; Sara Santiago Felipe. P202030357. MÉTODO PARA LA DETECCIÓN RÁPIDA DE CANDIDA AURIS Y EL DIAGNÓSTICO DE LA INFECCIÓN CAUSADA POR ESTE PATÓGENO 27/04/2020.
- 2 Elena Aznar Gimeno; Ramón Martínez Mañez; Luis Plá Blasco; Sara Santiago Felipe. P202030356. MÉTODO PARA LA DETECCIÓN Y DIAGNÓSTICO RÁPIDO DE STAPHYLOCOCCUS AUREUS 27/04/2020.
- 3 María Carmen Martínez Bisbal; Ramón Martínez Mañez. P202030235. MÉTODO PARA EL DIAGNÓSTICO, PRONÓSTICO Y MONITORIZACIÓN DE LA ENFERMEDAD DE ALZHEIMER MEDIANTE TÉCNICAS METABOLÓMICAS 23/03/2020.
- 4 Andrea Bernardos Bau; Eva María Garrido García; Ramón Martínez Mañez; Vicente Navarro Llopis. P201900166. Sistema de encapsulación y liberación controlada de piretroides de prolongada eficacia en el tiempo contra moscas de la fruta. 25/10/2019.
- 5 Juan Francisco Blandez Barradas; Irene Galiana Guillem; Alba García Fernández; Beatriz Lozano Torres; Ramón Martínez Mañez; Félix Sancenón Galarza. P201930893. COMPUESTO PARA LA DETECCIÓN DE CÉLULAS SENESENTES Y USO DEL MISMO 10/10/2019.
- 6 ADRIÁN HERNÁNDEZ TERUEL; Ramón Martínez Mañez; Félix Sancenón Galarza; VIRGINIA MERINO SANJUÁN. P201830512. SISTEMA DE LIBERACIÓN CONTROLADA Y MÉTODO DE PREPARACIÓN DEL MISMO 29/05/2018.
- 7 Beatriz Lozano Torres; Andrea Bernardos Bau; Irene Galiana Guillem; Ramón Martínez Mañez; Félix Sancenón Galarza. EP17382901.1. Therapeutic Nanoparticles 22/12/2017.
- 8 Elena Aznar Gimeno; María Dolores Marcos Martínez; Ramón Martínez Mañez; Ángela Ribes Momparler; Félix Sancenón Galarza; Elisabet Xifre Perez. P201731069. Material poroso para la detección de Candida albicans, método de diagnóstico que lo utiliza y método de preparación del mismo 05/09/2017.
- 9 Beatriz Lozano Torres; Andrea Bernardos Bau; Borja Díaz de Greñu Puertas; Irene Galiana Guillem; Ramón Martínez Mañez; José Ramón Murguía Ibáñez; Félix Sancenón Galarza. PCT/IB2017/000222. Therapeutic derivatives 10/02/2017.