

CURRICULUM VITAE (CVA)

IMPORTANT – The Curriculum Vitae cannot exceed 4 pages. Instructions to fill this document are available in the website.

Part A. PERSONAL INFORMATION

CV date

13/01/2025

First name	José Manuel		
Family name	Herrero Martínez		
Gender (*)	Male	Birth date (dd/mm/yyyy)	
Social Security, Passport, ID number			
e-mail	jmherrer@uv.es	URL Web	www.clecem.es
Open Researcher and Contributor ID (ORCID) (*)	0000-0002-8745-3795		

(*) Mandatory

A.1. Current position

Position	Full professor		
Initial date	04/09/2018		
Institution	University of Valencia		
Department/Center	Department of Analytical Chemistry	Faculty of Chemistry	
Country	Burjassot, Valencia, Spain	Teleph. number	963544062
Key words	Liquid chromatography, capillary (electro)separation, mass spectrometry, porous materials, sample treatment, 3D printing		

A.2. Previous professional status (including breaks in research career, according to what is indicated in the call, indicate total months)

Period	Position/Institution/Country/Interruption cause
Oct. 2001-Feb. 2004	Assistant professor/University of Barcelona/Contract change
Feb. 2004-Dec. 2005	Lecturer/University of Barcelona/Contract change (CC)
Jan. 2006-Dec. 2006	Ramón y Cajal researcher/University of Valencia/CC
Dec. 2006-Oct. 2009	Contracted lecturer/Univ. of Valencia/CC
Oct. 2009-Sept. 2018	Associate professor/Univ. of Valencia/CC

A.3. Education

PhD, Licensed, Graduate	University/Country	Year
Chemistry degree	University of Valencia	1996
PhD in Chemistry	University of Valencia	2000

Part B. CV SUMMARY (max. 5000 characters, including spaces) to complete this section,

Jose Manuel Herrero-Martínez (Sagunto, Spain, 1973), Chemistry Degree (Univ. of Valencia, Spain, 1996) and PhD in Chemistry (Univ. of Valencia, 2000). Assistant Professor (2001-2005) at the Dept. of Analytical Chemistry (Univ. of Barcelona, Spain), post-doctoral researcher (2003-2004) at the Dept. of Chemical Engineering (University of Amsterdam, The Netherlands), Contracted researcher/lecturer (2006-2009) and Associate Professor (2009-2018) and Full Professor (2018-) at the Dept. of Analytical Chemistry (Univ. of Valencia). His research interests comprise a wide spectrum of analytical techniques and applications including: capillary (electro)separation techniques (1994-), food authentication, control and safety (2004-), surfactant analysis and quality control of cleaning products including evaluation of their environmental impact (1998-), HPLC (1992-), HPLC-MS and CZE-MS (2004-) and development of new stationary phases for separation techniques (2005-) and smart materials for sample treatment (2015-). He has published around 200 research articles in international indexed journals (most of them located in the first quartile) (h-index 36, 4921 citations, Scopus,

13/01/2025), and 10 book chapters and edited a book. He has presented more than 350 communications at numerous international and national scientific meetings under different formats. He has participated in regional, national and international R&D projects (>20), and he has been in five the principal researcher. Also, he has participated in collaboration agreements (more than 20) with companies from various fields (detergency, agri-food sector, etc.), contributing significantly to the technology transfer. He has supervised 11 Doctoral Theses with Excellent Cum Laude (two with Doctorate award) and 4 PhD theses are currently in progress. Also, he has supervised numerous final degree and master's degree projects (45 and 40, respectively). Concerning assessment activities, he is evaluator of research projects from several research funding agencies such as National Evaluation and Prospective Agency (ANEP), Catalan University Quality Assurance Agency (AQU) and National Agency of Scientific and Technological Promotion (ANPCYT, Argentina). He has collaborated with research groups of several national and foreign universities, and currently collaborates with the University of Balearic Islands, University of Córdoba (Spain), Charles University (Czech Republic) and National University La Plata (Argentina). He has also been a member of the organizing committee for the XXI Meeting of the Spanish Society of Analytical Chemistry (SEQA) in 2017, and served on the scientific committees for several international congresses, such as: Latin-American Symposium on Biotechnology, Biomedical, Biopharmaceutical, and Industrial Applications of Capillary Electrophoresis and Microchip Technology (LACE2019), Advances in Extraction Techniques (ExTech2021 and 2023), 3rd European Sample Preparation Conference (EuSP2024), and Euroanalysis2024. He is a member of the editorial boards of the journals "Molecules", "Separations", and "Separation Science". Additionally, he has served as a guest editor for several special issues in the journals "Advances in Sample Preparation" and "Molecules". He is also member of the management board of SEQA since March 2022, and member of the committee of EuChemS-DAC Sample Preparation Study Group and Network. Besides, he has been Secretary of the Dept. Analytical Chemistry at Univ. Valencia (2011-2014). He has been recognized with four active six-year research periods ("sexenios") by National Committee for the Assessment of the Research Action (CNEAI) from 1997 to 2020.

Part C. RELEVANT MERITS

They may include publications, data, software, contracts or industrial products, clinical developments, conference, publications, etc. If these contributions have DOI, please include it

C.1. Publications

1. J.M. Herrero-Martínez, M. Miró, E.J. Carrasco-Correa, M. Vergara-Barberán, "3D Printing in Analytical Chemistry: Sample Preparation, Separation, and Sensing", Book editor and corresponding author Chapters 1 and 3, in press, Elsevier, Amsterdam (The Netherlands), 2025. ISBN: 9780443156755.
2. M. Catalá-Icardo, C. Gómez-Benito, H. Martínez-Pérez-Cejuela, E.F. Simó-Alfonso, J.M. Herrero-Martínez*, "Green synthesis of MIL53(Al)-modified paper-based analytical device for efficient extraction of neonicotinoid insecticides from environmental water samples", *Analytica Chimica Acta*, 1316 (2024) 342841. <https://doi.org/10.1016/j.aca.2024.342841>
3. N. Piqueras-García, M. Vergara-Barberán, M.J. Lerma-García, J.M. Herrero-Martínez*, "Aptamer-functionalized magnetic supports for sample preparation", *Advances in Sample Preparation* 7 (2023) 100083. <https://doi.org/10.1016/j.sampre.2023.100083>
4. H. Martínez-Pérez-Cejuela, D. Gregucci, M.M. Calabretta, E.F. Simó-Alfonso, J.M. Herrero-Martínez, E. Michelini*, "Novel nanozeolitic imidazolate framework (ZIF-8)-luciferase biocomposite for nanosensing applications", *Analytical Chemistry* 95 (2023) 2540-2547. <https://doi.org/10.1021/acs.analchem.2c05001>
5. M. Vergara Barberán, M. Catalá Icardo, E.F. Simó Alfonso, F. Benavente, J.M. Herrero-Martínez*, "Aptamer-functionalized stir bar sorptive extraction for selective isolation, identification and determination of concanavalin A in food by MALDI-TOF-MS", *Microchimica Acta* 190 (2023) 219. <https://doi.org/10.1007/s00604-023-05795-y>
6. H. Martínez-Pérez-Cejuela, R.B.R. Mesquita, E.F. Simó-Alfonso, J.M. Herrero-Martínez*, A.O.S.S. Rangel, "Combining microfluidic paper-based platform and metal-organic frameworks in a single device for phenolic content assessment in fruits", *Microchimica Acta* 190 (2023) 126. <https://doi.org/10.1007/s00604-023-05702-5>

7. E.J. Carrasco-Correa, J.M. Herrero-Martínez, E.F. Simó-Alfonso, D. Knopp, M. Miró*, “3D printed spinning cup-shaped device for immunoaffinity solid-phase extraction of diclofenac in wastewaters”, *Microchimica Acta* 189 (2022) 173. <https://doi.org/10.1007/s00604-022-05267-9>
8. A. Sorribes-Soriano, F.A. Esteve-Turrillas, S. Armenta, J.M. Herrero-Martínez*, “Dual mixed-mode poly (vinylpyridine-co-methacrylic acid-co-ethylene glycol dimethacrylate)-based sorbent for acidic and basic drug extraction from oral fluid samples”, *Analytica Chimica Acta* 1167 (2021) 338604. <https://doi.org/10.1016/j.aca.2021.338604>
9. H. Martínez-Pérez-Cejuela, K. Pravcová, L. Česlová, E.F. Simó-Alfonso, J.M. Herrero-Martínez*, “Zeolitic imidazolate framework-8 decorated with gold nanoparticles for solid-phase extraction of neonicotinoids in agricultural samples”, *Microchimica Acta* 188 (2021) 197. <https://doi.org/10.1007/s00604-021-04872-4>
10. S. Torres-Cartas, S. Meseguer-Lloret, C. Gómez-Benito, M. Catalá-Icardo, E.F. Simó-Alfonso, J.M. Herrero-Martínez*, “Preparation of monolithic polymer-magnetite nanoparticle composites into poly(ethylene-co-tetrafluoroethylene) tubes for uses in micro-bore HPLC separation and extraction of phosphorylated compounds”, *Talanta* 224 (2021) 121806. <https://doi.org/10.1016/j.talanta.2020.121806>.

C.2. Congress

1. *Oral presentation.* J.M. Herrero-Martínez, M.A. Martínez-Briones, A. Gil-Aparicio, E.J. Carrasco-Correa, M. Vergara-Barberán, M.J. Lerma-García, *Sustainable 3D printing materials paired with metal-organic frameworks: Revolutionizing environmental pollutant control* (ref. Oral AMatS4 Oral-03). 3rd Conference on Advanced Materials in Spain (AMatS2024), November 10-12, 2024, Valladolid (Spain).
2. *Invited conference.* J.M. Herrero-Martínez, M.J. Lerma-García, M. Beneito-Cambra, E.J. Carrasco-Correa, M. Vergara-Barberán, E.F. Simó-Alfonso, *Leveraging plastic's potential in sample preparation* (ref. Keynote KN-1). 3rd European Sample Preparation Conference and 2nd Green and Sustainable Analytical Chemistry Conference (EuSP2024), September 15-18, 2024, Chania (Crete, Greece).
3. *Invited conference.* J.M. Herrero-Martínez, *Affordable sample treatment: smart materials and low-cost supports leading the way* (ref. Plenary lecture, PL4). 11th Meeting of the Analytical Chemistry Division (Analitica2024), March 25-26, 2024, Porto (Portugal).
5. *Oral presentation.* J.M. Herrero-Martínez, M. Vergara-Barberán, E.J. Carrasco-Correa, M. Beneito-Cambra, M.J. Lerma-García, E.F. Simó-Alfonso, *Affinity sorbents in low-cost supports: A green and efficient path in microextraction* (ref. Oral OC-26). XXII Meeting of the Spanish Society of Chromatography and Related Techniques (SECyTA2023), October 16-18, 2023, Palma de Mallorca (Spain).
6. *Invited conference.* J.M. Herrero-Martínez, H. Martínez-Pérez-Cejuela, M. Vergara-Barberán, E.J. Carrasco-Correa, M. Beneito-Cambra, M.J. Lerma-García, E.F. Simó-Alfonso, *Smart materials and low-cost supports: A well-matched couple for sample preparation* (ref. Keynote presentation KN-01). 25th International Symposium on Advances in Extraction Technologies (ExTech2023), July 18-21, 2023, Tenerife (Spain).
7. *Invited conference.* J.M. Herrero-Martínez, M. Vergara-Barberán, M.J. Lerma-García, M. Beneito-Cambra, E.F. Simó-Alfonso, *Aptamer-modified magnetic nanoparticles in miniaturized extraction techniques. Opportunities and challenges* (ref. Keynote KN5). X International Congress on Analytical Nanoscience and Nanotechnology (NyNA2022), September 5-8, 2024, Ciudad Real (Spain).
9. *Oral presentation.* J.M. Herrero-Martínez, M. Vergara-Barberán, A. Moga, E.F. Simó-Alfonso, F. Benavente, *Development of an aptamer functionalized polymer monolith for the selective detection of concanavalin A by on-line solid-phase extraction capillary electrophoresis* (ref. OP-4). 25th Latin-American symposium on biotechnology, biomedical, biopharmaceutical, and industrial applications of capillary electrophoresis and microchip technology (LACE2019). 29 September-2 October, 2019, Alcalá de Henares (Spain).
10. *Oral presentation.* J.M. Herrero-Martínez, H. Martínez-Pérez-Cejuela, M. Mon, J. Ferrando-Soria, E. Pardo, E.F. Simó-Alfonso, *Sorbents based on bio-metal-organic frameworks for (micro)solid-phase extraction of hydrophilic vitamins in fruit juices and energy drinks* (ref. OC-29). 48th International Symposium on High-Performance Liquid Phase Separations and Related Techniques (HPLC2019), June 16-20, 2019, Milan (Italy).

C.3. Research projects

1. PID2021-125459OB-I00. *Técnicas de microextracción y análisis in situ sostenibles en dispositivos flexibles y baratos y materiales porosos avanzados para aplicaciones alimentarias y medioambientales*. Ministerio de Ciencia, Innovación y Universidades. **PIs:** J.M. Herrero Martínez & E.F. Simó Alfonso. 01/09/2022-31/08/2026. 150.000 €.
2. MFA/2022/034. *Desarrollo de materiales porosos funcionales y ecológicos basados en impresión en 3D para la monitorización y eliminación de contaminantes emergentes*. Plan Complementario de Materiales Avanzados. Ministerio de Ciencia, Innovación y Universidades & Generalitat Valenciana. **PI:** J.M. Herrero Martínez. 30/06/2022-31/12/2025. 101.447 €.
3. CIAICO/2022/1833. *Innovative analytical platforms in sample treatment for assessing hazard compounds in environmental compartments and food*. Generalitat Valenciana. **PIs:** J.M. Herrero Martínez & M.J. Lerma García. 01/01/2023-31/12/2025. 90.000 €
4. RTI2018-095536-B-I00. *Desarrollo de materiales poliméricos funcionales en plataformas flexibles para aplicaciones medioambientales y toxicológicas*. Ministerio de Ciencia, Innovación y Universidades. **PIs:** J.M. Herrero Martínez & E.F. Simó Alfonso. 01/01/2019-30/06/2022. 92.444 €.
5. RED2018-102522. *Red Nacional para la Innovación en las Técnicas de Tratamiento de muestras miniaturizadas*. Ministerio de Ciencia, Innovación y Universidades. **PI:** M. Cárdenas (Univ. Córdoba). 01/01/2020-31/10/2022. 20.000 €. *Type of participation:* Researcher.
6. RED2022-134979-T. *Red Nacional para la Sostenibilidad en la Preparación de Muestra*. Ministerio de Ciencia, Innovación y Universidades. **PI:** M. Cárdenas (Univ. Córdoba). 01/06/2023-31/05/2025. 20.390 €. *Type of participation:* Researcher.
7. PROMETEO/2016/145. *Sistemas de separación basados en nuevos polímeros porosos y composites polímero-nanopartículas con aplicaciones industriales y medioambientales*. Generalitat Valenciana. **PIs:** G. Ramis Ramos & E.F. Simó Alfonso. 01/01/2016-31/12/2019. 182.000 €. *Type of participation:* Researcher.
8. CTQ2014-52765-R. *Desarrollo de fases estacionarias monolíticas híbridas polímero-nanopartículas y sus aplicaciones en separación*. Ministerio de Economía y Competitividad. Plan Nacional de I+D+i. **PIs:** G. Ramis Ramos & J.M. Herrero Martínez. 01/01/2015-31/12/2017. 84.000 €.

C.4. Contracts, technological or transfer merits

1. "Análisis de contaminantes emergentes en muestras de agua continental o residual". GAMASER. **PI:** S. Armenta. May 2024-May 2025. 120.000 €. *Type of participation:* Researcher.
2. "Desarrollo de formulados y de métodos de análisis para el control de calidad tanto de materias primas como de productos finalizados" OROBRANDS ALTAIR GROUP S.A.U. **PI:** E.F. Simó Alfonso. January 2024-January 2026, 21.780 €. *Type of participation:* Researcher.
3. "Desarrollo de un método de concentración de sustancias húmicas y fúlvicas en agua bruta". EMIVASA. **PI:** E.F. Simó Alfonso. September 2020-September 2022. 27.000 €. *Type of participation:* Researcher.
4. "Desarrollo de metodologías de análisis y análisis de péptidos", Polypeptide therapeutic solutions S.L. **IP:** J.M. Herrero Martínez. April 2022-April 2023. 5.630 €.
5. "Desarrollo de nuevos formulados, limpiadores sostenibles; estudio de mercado". Químicas Oro, S.A. **PI:** E.F. Simó Alfonso. May 2016-April 2022. 108.000 €. *Type of participation:* Researcher.
6. "Desarrollo de un método de eliminación de los restos de desinfectantes presentes en las aguas de lavado de depósitos". CLEANITY, S.L. Center for the Development of Industrial Technology (CDTI) project. **PI:** E.F. Simó Alfonso. November 2020-October 2021. 15.000 €. *Type of participation:* Researcher.