

Fecha del CVA

31/03/2025

Parte A. DATOS PERSONALES

Nombre	MARIA JESUS		
Apellidos	SANCHIS SANCHEZ		
Sexo	Mujer	Fecha de Nacimiento	
DNI/NIE/Pasaporte			
URL Web			
Dirección Email	jsanchis@ter.upv.es		
Open Researcher and Contributor ID (ORCID)	0000-0002-3528-3966		

A.1. Situación profesional actual

Puesto	Professor/CATEDRATICA DE UNIVERSIDAD		
Fecha inicio	2010		
Organismo / Institución	Universidad Politécnica de Valencia		
Departamento / Centro	Termodinámica Aplicada / Escuela Técnica Superior de Ingenieros Industriales		
País		Teléfono	
Palabras clave	Termodinámica; Propiedades mecánicas; Dieléctricos		

A.2. Situación profesional anterior (incluye interrupciones en la carrera investigadora - indicar meses totales, según texto convocatoria-)

Periodo	Puesto / Institución / País
2019 - 2021	Secretario / Escuela Técnica Superior de Ingenieros Industriales
2017 - 2019	Secretaria del departament de Termodinàmica Aplicada / Universidad Politécnica de Valencia
2013 - 2017	Secretaria del Departament de Termodinàmica Aplicada / Universidad Politecnica de Valencia
2012 - 2017	Secretaria del Departament de Termodinàmica Aplicada / Universidad politecnica de valencia
2004 - 2008	Secretaria del Departament de Termodinàmica Aplicada / Universidad Politecnica de Valencia
1998 - 1999	Secretaria del Departament de Termodinàmica Aplicada / Universidad Politécnica de Valencia
1995 - 1997	Secretario Dpto . Termodinàmica Aplicada / Universidad Politécnica de Valencia

Parte B. RESUMEN DEL CV

Degree in chemistry from the University of Valencia (UV) (1988) and Dra. Chemistry from the UV (February, 1993). During my pre-doctoral research stage, as part of the Institute of Materials Science of the UV: 1988-1992, my research focused on the design of new ways of synthesis and characterization of superconducting oxide precursor materials of high critical temperature. During this period my work was reflected in 15 scientific publications and 14 communications to Congresses. After the doctorate, I began a new stage combining my research with my work as teacher in the Department of Applied Thermodynamics at the Polytechnic University of Valencia (UPV). Currently I am Professor Full Professor of the Department of Heat Engines at the UPV. My teaching experience began in 1990 as a support in practical sessions metallurgy degree in Chemical, specialty chemical Fundamental (Q. Inorganic). In 1992 as an assistant University started teaching at the department of Applied Thermodynamics of the UPV, lecturing (in many cases responsible for the course), mainly in the degrees of Industrial Engineering, Chemical Engineering and Materials Engineering related subjects with thermodynamics and materials science. I have taught in 1 master and PhD programs (Molecular Physical Chemistry, Molecular

Mechanics dielectric materials) and directed 13 Final Projects, Jobs and Jobs Final Project Master's Thesis. I have participated in 3 teaching publications and in 14 teaching Projects.

My research focus in the area of Materials Science, and more specifically in the thermal, mechanical and electrical characterization and in the analysis of the structure-properties of polymeric materials mainly related to different types of applications in electrical engineering, electronics, energy, biotechnology, pharmaceutical,

I have 106 publications including contributions from journal articles, books and book chapters, and 85 papers at Congress. I have participated as a researcher in 27 projects funded in public announcements. I have also worked with companies, conducting studies in order to solve specific problems. I have supervised five doctoral theses and I have five periods of 6 years on research work recognized by the Ministry of Education and Science.

Parte C. LISTADO DE APORTACIONES MÁS RELEVANTES

C.1. Publicaciones más importantes en libros y revistas con “peer review” y conferencias

AC: Autor de correspondencia; (nº x / nº y): posición firma solicitante / total autores. Si aplica, indique el número de citaciones

- 1 **Artículo científico.** Caitriona Winters; Marta Carsí; Maria J. Sanchis; Mario Culebras; Maurice N. Collins. 2024. On the design of lignin reinforced acrylic acid/hyaluronic acid adhesive hydrogels with conductive PEDOT:HA nanoparticles. International Journal of Biological Macromolecules. Elsevier. 273.
- 2 **Artículo científico.** Marta Carsí; Karen N. Gonzales; Fernando G. Torres; Maria J. Sanchis. 2024. Ulvan based materials doped with lithium sulfate salts as solid biopolymer electrolytes for energy storage applications. Algal Research. ELSEVIER. 78, pp.103401.
- 3 **Artículo científico.** Marta; Maria J.; José F.; Mario; Clara M. 2023. Coating of Felt Fibers with Carbon Nanotubes and PEDOT with Different Counterions: Temperature and Electrical Field Effects. Polymers. MDPI.
- 4 **Artículo científico.** Diana; Victoria; Lucas; et al; Otavio. 2022. Effect of chain extenders on the hydrolytic degradation of soybean polyurethane. Journal of Applied Polymer Science. Wiley.
- 5 **Artículo científico.** Aleksandra; Mario; Marta; et al; Maurice. 2022. Electroconductive PEDOT nanoparticle integrated scaffolds for spinal cord tissue repair. Biomaterials Research. BMC.
- 6 **Artículo científico.** Diana; Victoria; Carlos A.; et al; Otavio. 2021. Effect of chain extender on the morphology, thermal, viscoelastic, and dielectric behavior of soybean polyurethane. Journal of Applied Polymer Science. Wiley.
- 7 **Artículo científico.** José F. Serrano-Claumarchirant; Isaac Brotons; Mario Culebras; Maria J. Sanchis; Andrés Cantarero; Rafael Muñoz-Espí; Clara M. Gómez. 2020. Electrochemical Synthesis of an Organic Thermoelectric Power Generator. ACS APPLIED MATERIALS&INTERFACES. ACS. 9, pp.1.
- 8 **Artículo científico.** P. Ortiz-Serna; M. Carsí; M. Culebras; M.N. Collins; M.J. Sanchis. 2020. Exploring the role of lignin structure in molecular dynamics of lignin/biopolymer thermoplastic elastomer polyurethane blends. International Journal of Biological Macromolecules. Elsevier. 158, pp.1369-1379.
- 9 **Artículo científico.** Juan Jairo Vaca-González; Sandra Clara-Trujillo; María Guillot-Ferriols; Joaquín Ródenas-Rochina; María J. Sanchis; José Luis Gómez Ribelles; Diego Alexander Garzón-Alvarado; Gloria Gallego Ferrer. 2020. Effect of electrical stimulation on chondrogenic differentiation of mesenchymal stem cells cultured in hyaluronic acid – Gelatin injectable hydrogels. Bioelectrochemistry. Elsevier. 134, pp.107536.

- 10 Artículo científico.** Diana Favero; Victória R.R. Marcon; Thiago Barcellos; Clara M. Gómez; Maria J. Sanchis; Marta Carsí; Carlos A. Figueroa; Otávio Bianchi. 2019. Renewable polyol obtained by microwave-assisted alcoholysis of epoxidized soybean oil: Preparation, thermal properties and relaxation process. Journal of Molecular Liquids. ELSEVIER. 285, pp.136-145. <https://doi.org/10.1016/j.molliq.2019.04.078>
- 11 Artículo científico.** M.J. Sanchis; M. Carsí; Clara M. Gómez; Sol Rodriguez; Fernando C. Torres. 2019. Effect of Chitin whiskers to modulate the molecular dynamics of carrageenan matrix. Polymers. Elsevier. 11-6, pp.1083-1099. <https://doi.org/doi:10.3390/polym11061083>
- 12 Artículo científico.** Mario Culebras; José F. Serrano-Claumarchirant; Maria J. Sanchis; Katharina Landfester; Andre?s Cantarero; Clara M. Gómez; Rafael Muñoz-Espí. 2018. Conducting PEDOT Nanoparticles: Controlling Colloidal Stability and Electrical Properties. J. Phys. Chem.American Chemical Society. 122, pp.19197-19203. <https://doi.org/DOI: 10.1021/acs.jpcc.8b04981>
- 13 Artículo científico.** M.J. Sanchis; M. Carsí; S. Vallejos; Félix García. 2018. Molecular Dynamics of Functional Azide-Containing Acrylic Films. Polymers. Elsevier. 10, pp.859-876. <https://doi.org/doi:10.3390/polym10080859>
- 14 Artículo científico.** Mario Culebras; Anne Beaucamp; Maria J. Sanchis; Marta Carsí; Baljinder K. Kandola; A. Richard Horrocks; Gianmarco Panzetti; Maurice N Collins. 2018. Understanding the thermal and dielectric response of organosolv and modified lignin as carbon fibres precursors. Green Chemistry. Royal Society of Chemistry. 21, pp.DOI: 10.1039/C8GC01577E-37. <https://doi.org/DOI: 10.1039/c8gc01577e>

C.3. Proyectos o líneas de investigación

- 1 Proyecto.** Valorización de restos naturales de poda para composites relacionados con la energía mediante estrategias sostenibles. Ministerio de Ciencia, innovación y universidades. Clara M Gómez Clari. (Universitat de València/Universitat Politècnica de Valencia). 01/09/2024-31/08/2027.
- 2 Proyecto.** Encapsulación sostenible mediante biopolímeros de origen vegetal para aplicaciones agrícolas. MINISTERIO DE EDUCACION Y CIENCIA. MUÑOZ ESPI 1. (UNIVERSITAT POLITÈCNICA DE VALENCIA). 01/12/2022-01/12/2024. 165.255 €.