

Part A. PERSONAL INFORMATION		CV date		09/21/2018
First and Family name	SANTIAGO VELASCO MAÍLLO			
Social Security, Passport, ID number	08094565Z	Age	67	
Researcher numbers	Researcher ID	A-3550-2016		
	Orcid code	0000-0002-3851-0212		

A.1. Current position

Name of University/Institution	University of Salamanca		
Department	Applied Physics		
Address and Country	Faculty of Sciences, 37008, Salamanca, Spain		
Phone number	+34677565483	E-mail	santi@usal.es
Current position	Professor	From	
Espec. cód. UNESCO	2213, 220510		
Palabras clave	Thermodynamics; Working Fluids; ORC		

A.2. Education

PhD	University	Year
Physics	University of La Laguna	1975

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

- ✓ 161 JCR articles (71 Q1)
- ✓ Web of Science: Sum of times cited: 1543; Average citations per item: 9.64; Average citations/year (last 5 years): 77.8; h-index: 20
- ✓ Google Scholar: Sum of times cited: 1953; Average citations/year (last 5 years): 109; h-index: 23
- ✓ PhD thesis supervised: 6 (1986, 1987, 1988, 1990, 1994, and 1996)

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

1.- Research experience:

- 186 papers (161 JCR) and 13 book chapters.
- Participant in 20 research projects (14 Spanish government projects, 5 Regional projects and 1 private foundation).
- Research leader in 4 Spanish government projects and 1 Regional project.
- Spanish ANEP reviewer.
- Reviewer of several JCR journals.
- I have been recognized with 7 steps in the Spanish system of research evaluation.
- Co-editor of a special number of The Journal Molecular Liquids (JCR review, 1996)

2.-Teaching experience

- Supervisor of 6 PhD theses, 5 minor thesis, 3 Degree works.
- I have been recognized with 8 teaching steps in the Spanish system of teaching evaluation.
- 48 teaching articles published in international journals (some of them JCR journals).
- 5 teaching books.
- Participant in 8 teaching innovation projects. Project leader in 2 of them.

Teaching evaluation program DOCENTIA-USAL: Positive evaluation during the periods 2004/05-2008/09 and 2008/09-2012/13.

Part C. RELEVANT MERITS

C.1. Publications (most relevant, last 10 years)

1. Basurto-Flores R., Guzmán-Vargas L., Velasco S., Medina A, and Calvo Hernández A., **2018**, *On entropy research analysis: cross-disciplinary knowledge transfer* Scientometrics, 117, 123-139 (Article, Q2)
2. White, J. A. ; Velasco, S., **2018**, *Characterizing wet and dry fluids in temperature-entropy diagrams*, Energy, 154, 269–276 (Article, Q1)
3. Velasco, S. ; Santos M. J.; White, J. A. , **2015**, *Consistency of Vapor Pressure Equations at the Critical Point*, Industrial & engineering chemistry research, 85, 12993-12998 (Article, Q2)
4. Calvo Hernández A., Roco J. M. M., Medina A., Velasco S, Guzmán-Vargas L., **2015**, *The maximum power efficiency $1-(\tau)^{1/2}$: Research, education, and bibliometric relevance*, European Physical Journal-Special Topics, 224, 809–823 (Article, Q2)
5. Velasco, S.; Santos M. J.; White, J. A., **2015**, *Extended corresponding states expressions for the changes in enthalpy, compressibility factor and constant-volume heat capacity at vaporization*, Journal of chemical thermodynamics, 54, 68- 76 (Article, Q1)
6. White, J. A.; Santos M. J.; Rodríguez-Valverde, M.A.; Velasco, S., **2015**, *Numerical Study of the Most Stable Contact Angle of Drops on Tilted Surfaces*, Langmuir, 31, 5326-5332 (Article, Q1)
7. Srinivasan K.; S. Velasco S.; White J. A., **2014**, *On the relation between the isentropic index and the Grüneisen parameter for saturated liquids*, Industrial & Engineering Chemistry Research, 53, 6866-6870. (Article, Q1)
8. Velasco, S. ; White, J. A., **2014**, *Some empirical rules concerning the vapor pressure curve revisited*, Journal of chemical thermodynamics, 68, 193- 198. (Article, Q1)
9. Velasco S.; Santos M. J.; White J. A.; Srinivasan K., **2013**, *The curvature of the liquid-vapor reduced pressure curve and its relation with the critical region*, Journal of chemical thermodynamics, 60, 41-45. (Article, Q1)
10. Srinivasan K.; Dutta P.; Velasco, S. ; White, J. A., **2013**, *On isentropic lines and isentropic exponents*, Journal of chemical thermodynamics, 56, 144- 148. (Article, Q1)
11. Velasco S.; Santos M. J.; White J. A., **2013**, *The Miller function, a sensitivity test for equations of state and theoretical vapor pressure data*, Journal of chemical thermodynamics, 58, 263-268. (Article, Q1)
12. Santos M. J.; Velasco, S.; White, J. A., **2012**, *Simulation Analysis of Contact Angles and Retention Forces of Liquid Drops on Inclined Surfaces*, Langmuir, 28, 11819 - 11826. (Article, Q1)
13. Srinivasan K.; Ng K. C.; Velasco, S.; White, J. A., **2012**, *A corresponding states treatment of the liquid-vapor saturation line*, Journal of chemical thermodynamics, 44, 97- 101. (Article, Q1)
14. Velasco S.; White J. A.; Srinivasan K.; Dutta P., **2012**, *On the Waring and Riedel functions for the liquid-vapor coexistence curve*, Industrial & Engineering Chemistry Research, 51 3197-3202. (Article, Q1)
15. Fernández-Pineda C.; Velasco S., **2012**, *Comments on 'Historical Observations on Laws of Thermodynamics*, Journal of Chemical & Engineering Data, 57, 1347-1347. (Article, Q2)
16. González A.; White J. A.; Román F. L.; Velasco S., **2011**, *Entropic selectivity of binary mixtures in cylindrical pores*, Journal of Chemical Physics, 135, 154704-8. (Article, Q1)
17. Velasco S.; White J. A.; **2011**, *On the self-consistency of three-parameter corresponding-states equations for vapor pressure*, Journal of Chemical & Engineering Data, 56, 1163-1166. (Article, Q2)

18. Sánchez-Salas N.; López-Palacios L. Calvo-Hernández A.; Velasco S., **2010**, *Optimization criteria, bounds, and universal efficiencies of heat engines*, Physical Review E, 82 051101-1-5. (Article, Q1)
19. Velasco S.; Román F. L.; White J. A.; **2010**, *On Srinivasan's criterion for the vapor pressure curve*, Journal of Chemical & Engineering Data, 55, 4244-4247. (Article, Q2)
20. Mulero A.; Parra M. I.; Román F. L.; Velasco S., **2010**, *General Correlation Model for Some Physical Properties of Saturated Pure Fluids*, Journal of Chemical Thermodynamics, 42, 938-946. (Article, Q1)
21. Velasco, S. ; Román, F. L. ; White, J. A. ; Angel Mulero, **2008**, *A predictive vapor-pressure equation*, Journal of chemical thermodynamics, 40, 789- 797. (Article, Q1)

C.2. Research projects and grants (last 5 years)

1. Title: *Low-scale hybrid thermosolar plants for distributed energy generation*
Regional level
Main researcher: Calvo Hernández, A.
Number of researchers: 7
Funding agency: JCyL (Spain), SA017-P17
Dates: 01/01/2017 - 31/12/2019, 3 years
Budget: 108.380 €
2. Title: *Efficient energy converters and sustainable working fluids*
National level
Main researchers: Calvo Hernández, A. and White Sánchez, J.A.
Number of researchers: 13
Funding agency: MINECO (Spain), ENE2013-40644-R
Dates: 01/01/2014 - 31/12/2016, 3 years
Budget: 56.870 €
3. Title: *Mesoscopic structure of sessile fluids*
National level
Main researchers: White Sánchez, J.A.
Number of researchers: 5
Funding agency: MINECO (Spain), FIS2009-07557
Dates: 01/01/2010 - 31/12/2013, 4 years
Budget: 24.200 €

C.3. Contracts (last 5 years)

1. Reference: IQPC-TERMOSOLARES
Title: *Thermo-economic optimization of recuperative multi-stage hybrid thermo solar plants in Castilla y León*
Main researcher: Medina Domínguez, A.
Funding agency: Junta de Castilla y León, Fundación General Universidad de Salamanca
Dates: 01/04/2016 – 31/03/2017
Budget: 6.000 €
2. Reference: FPC-TERMOHIBRIDAS
Title: *Thermo and techno-economic assessment of hybrid thermo solar plants*
Main researcher: Calvo Hernández, A.
Funding agency: Junta de Castilla y León, Fundación General Universidad de Salamanca
Dates: 01/04/2016 – 31/07/2016
Budget: 9.000 €



C.5, C.6, C.7... (e. g., Institutional responsibilities, memberships of scientific societies...)

- ✓ Staff Editor of the Journal Molecular Liquids (JCR review. Since 1993)
- ✓ Member of the Research Advisory Committee, University of Salamanca (1996-2003)
- ✓ Member of the Publications Council, University of Salamanca (2000-2016)
- ✓ Member of the Local Committee of the XVth Congreso Nacional de Física Estadística FisEs'08 held in Salamanca from 27/03/2008 until 29/03/2008
- ✓ Number of research steps acknowledged: 7 (maximum achievable)
- ✓ Number of teaching steps acknowledged: 8 (maximum achievable)