

Part A. PERSONAL INFORMATION

CV date 06/05/2025

First and Family name	Juan Antonio White Sánchez		
Social Security, Passport, ID number	08105123S	Age	60
Researcher codes	Open Researcher and Contributor ID (ORCID**)	0000-0003-4184-4384	
	SCOPUS Author ID (*)	"White, Juan A." 7405247998	
	WoS Researcher ID (*)	D-7961-2011	

(*) *Optional*

(**) *Mandatory*

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	+34677565489	E-mail	white@usal.es
Current position	Full Professor	From	09/26/2014
Key words	Thermodynamics; Working Fluids; ORC		

A.2. Education

PhD, Licensed, Graduate	University	Year
Licensed Physics	University of Salamanca	1987
PhD Physics	University of Salamanca	1990

A.3. General indicators of quality of scientific production (see instructions)

- ✓ **Number of research steps acknowledged:** 5 (latest step: 2013-2018)
- ✓ **Web of Science:**
 - 82 JCR articles (39 Q1)
 - Sum of times cited: 1172
 - Average citations/year (last 5 years): 52
 - h-index: 16
- ✓ **Scopus:**
 - 88 documents
 - Sum of times cited: 1327
 - Average citations/year (last 5 years): 58
 - h-index: 18
- ✓ **Google Scholar:**
 - Sum of times cited: 1703
 - Average citations/year (last 5 years): 78
 - h-index: 23
- ✓ **PhD thesis supervised:** 3 (1996, 1997 and 2012)

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

1.- Research experience:

- 82 JCR papers and 6 book chapters.
- 51 conference contributions, 2 invited contributions
- Participant in 24 research projects (14 Spanish government projects, 5 Regional projects and 5 local projects).
- Research leader in 8 Spanish government projects and 2 local projects (University of Salamanca).
- Three medium-length research stays in leading international research institutions.



- Spanish ANEP reviewer.
- Reviewer of several JCR journals.
- I have been recognized with 5 research steps in the Spanish system of research evaluation.

2.-Teaching experience

- Supervisor of 3 PhD theses, 2 minor thesis, 2 MSc thesis and several Degree works.
- I have been recognized with the maximum level in the Spanish system of teaching evaluation (6/6 teaching steps).
- 10 teaching articles published in international journals (some of them JCR journals).
- 1 teaching book.
- Participant in 10 teaching innovation projects. Project leader in 5 of them.
- Participant in 10 courses of teaching innovation.
- Teaching evaluation program DOCENTIA-USAL: Positive evaluation during the periods 2004/05-2007/08, 2008/09-2012/13, 2013/14-2017/18 and 2018/19-2022/23.

Part C. RELEVANT MERITS (sorted by typology)

C.1. Publications (see instructions)

1. González-Ayala, J.; Calvo Hernández, A.; White, J. A.; Medina, A.; Roco, J.M.M.; Velasco, S., **2022**, *Success versus failure: Efficient heat devices in thermodynamics*, Physical Review E, 105: 014115 (Article, Q1)
2. White, J. A. ; Velasco, S., **2019**, *A Simple Semiempirical Method for Predicting the Temperature–Entropy Saturation Curve of Pure Fluids*, Industrial & engineering chemistry research, 85: 12993-12998 (Article, Q2)
3. White, J. A. ; Velasco, S., **2018**, *Characterizing wet and dry fluids in temperature-entropy diagrams*, Energy, 154: 269–276 (Article, Q1)
4. 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)
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. Velasco, S. ; White, J. A. , **2014**, *Some empirical rules concerning the vapor pressure curve revisited*, Journal of chemical thermodynamics, 68: 193- 198. (Article, Q1)
8. K Srinivasan; P Dutta; Velasco, S. ; White, J. A. , **2013**, *On isentropic lines and isentropic exponents*, Journal of chemical thermodynamics, 56: 144- 148. (Article, Q1)
9. 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)
10. Kandadai Srinivasan; K. C. Ng; 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)
11. Santos M. J.; White, J. A., **2011**, *Theory and Simulation of Angular Hysteresis on Planar Surfaces*, Langmuir, 27: 14686- 14875. (Article, Q1)

C.2. Research projects

1. Title: *Integración de la dinámica de sistemas packed-bed en almacenamiento energético mediante sistemas de bombas a alta temperatura.*
National level
Main researcher: Medina, A. and Santos, M.J.
Number of researchers: 15
Funding agency: Agencia Estatal de Investigación (Spain)
Dates: 01/01/2025 - 31/12/2027, 3 years

- Budget: 62500 €
2. 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 €
 3. 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 €
 4. Title: *Estructura Mesoscópica de Fluidos Sésiles*
National level
Main researcher: 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, technological or transfer merits

- **Reference: LANZADERA_TCUE18-20_010**
Title: *Planta de concentración termosolar de disco parabólico con ciclo Brayton híbrida para generación distribuida de energía(BraySolDish)*
Main researcher: Irene Heras Pérez (10 participantes)
Financing Entity: Fundación General Universidad de Salamanca
Period 01/07/2019 – 31/12/2019; Budget: 10.000 €
- **Reference: IQPC-TERMOSOLARES**
Title: *Thermo-economic optimization of recuperative multi-stage hybrid thermosolar plants in Castilla y León*
Main researcher: Alejandro Medina Domínguez
Financing Entity: Junta de Castilla y León, Fundación General Universidad de Salamanca
Period: 01/04/2016 – 31/03/2017; Budget: 6.000 €
- **Reference: FPC-TERMOHIBRIDAS**
Title: *Thermo and tecno-economic assessment of hybrid thermosolar plants*
Main researcher: Antonio Calvo Hernández
Financing entity: Junta de Castilla y León, Fundación General Universidad de Salamanca
Period: 01/04/2016 – 31/07/2016; Budget: 9.000 €

C.5. Institutional responsibilities and membership of scientific committees

- ✓ Member of the Research Advisory Committee, University of Salamanca, 2016-2022
- ✓ Member of the Juan de la Cierva Committee, years 2015, 2016
- ✓ Member of the Organizing committee of the Summer School on Statistical Physics of Complex and Small Systems (2010 – 2012)
- ✓ Member of the Scientific committee of the Congreso Nacional de Física Estadística FisEs (2006 – 2012)
- ✓ Organizer of the XVth Congreso Nacional de Física Estadística FisEs'08 held in Salamanca from 27/03/2008 until 29/03/2008