

# **Curriculum vitae**

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Bachelor Degree : Chemistry, U.Complutense, 1987.

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1. AUTHORS :S.Lago y C.Vega  
Title: *A generalization for mixtures of a fast algorithm to calculate some orientational averages*  
Journal: Computers and Chemistry **12**, 343–356, (1988).

---
2. AUTHORS : C.Vega y D.Frenkel  
Title: *Monte Carlo study of rod like molecules. A test of perturbation theory for the Kihara model*  
Journal: Molecular Physics **67**, 633–650, (1989).

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3. AUTHORS :C.Vega,B.Saager y J.Fischer  
Title: *Molecular dynamics studies for the new refrigerant R152a with simple model potentials*  
Journal:Molec.Phys., **68**, 1079-1093, (1989).

---
4. AUTHORS : T.Boublik, C.Vega y M.D.Peña  
Title: *Equation of state of chain molecules*  
Journal: J.Chem.Phys. **93**, 730–736 (1990).

---
5. AUTHORS :T.Boublik, C.Vega, S.Lago y M.D.Peña  
Title: *Quadrupolar hard gaussian*  
Journal: Molec.Phys. **71**, 1193–1203, (1990).

---
6. AUTHORS : C.Vega y S.Lago  
Title: *Molecular dynamics study of propane using two simple potential models*  
Journal: J.Chem.Phys. **93**, 8171–8179, (1990).

---
7. AUTHORS : C.Vega y S.Lago  
Title: *Structural study of the angle averaged soft Kihara potential for linear molecular models. A test of perturbation theory*  
Journal:Molec.Phys. **72**, 215–228 , (1991).

---
8. AUTHORS : C.Vega y S.Lago  
Title: *Perturbation theory of angular Kihara fluids*  
Journal:Journal of Chemical Physics **94**,310–320, (1991)

---
9. AUTHORS : P.Sevilla, S.Lago, C.Vega y P.Padilla  
Title: *Solution of the Percus-Yevick equation for linear molecules interacting through either a Kihara or a soft repulsive potential*  
Journal: Phys.Chem.Liq. **23**,1–14, (1991).

---
10. AUTHORS : A.Lopez Rodriguez, C.Vega, J.Freire y S.Lago  
Title: *Potential parameters of methylene and methyl group from second virial coefficients of n-alkanes*  
Journal: Molecular Physics **73**, 691–701 (1991).

---
11. AUTHORS :P.Padilla, S.Lago y C.Vega  
Title: *A bridge between Fischer and Boublik Thermodynamic perturbationtheory : Calculating thermodynamic properties of pure substances*  
Journal:Molecular Physics **74**, 161–176, (1991).

---

12. AUTHORS : C.Vega y S.Lago  
Title: *Improved perturbation theory of Kihara fluids*  
Journal: Chem.Phys.Lett. **185**, 516–521, (1991).
- 
13. AUTHORS : C.Vega  
Title: *Perturbation theory of hard quadupolar fluids*  
Journal: Molec.Phys. **75**, 427–442, (1992)
- 
14. AUTHORS : C.Vega y K.E.Gubbins  
Title: *Monte Carlo study of quadrupolar Kihara fluids*  
Journal: Molec.Phys. **75**, 881–895, (1992).
- 
15. AUTHORS : C.Vega, S.Lago y P.Padilla Title: *Thermodynamic properties of molecular fluids of any geometry from perturbation theory* Journal: J.Phys.Chem. **96**, 1900–1905, (1992).
- 
16. AUTHORS : C.Vega, S.Lago, R.Pospisil, S.Labik and A.Malijevsky Title: *Thermodynamic properties of mixtures from perturbation theory* Journal: J.Phys.Chem. **96**, 1895–1899, (1992).
- 
17. AUTHORS : C.Vega, E.P.A.Paras y P.A.Monson Title: *Solid-fluid equilibria for hard dumbbells via Monte Carlo simulation* Journal: J.Chem.Phys. **96**, 9060–9072, (1992).
- 
18. AUTHORS : C.Vega, S.Lago, E.de Miguel y L.Rull Title: *Liquid-vapor equilibria of linear Kihara molecules*. Journal: J.Phys.Chem. **96**, 7431–7437, (1992)
- 
19. AUTHORS : E.P.A.Paras, C.Vega y P.A.Monson Title: *Application of the cell theory to the thermodynamic properties of hard dumbbell solids* Journal: Molec.Phys. **77**, 803–821, (1992).
- 
20. AUTHORS : C.Vega, E.P.A.Paras y P.A.Monson Title: *On the stability limit of the plastic crystal phase of hard dumbbell solids* Journal: J.Chem.Phys. **97**, 8543–8548, (1992).
- 
21. AUTHORS : E.P.A.Paras, C.Vega y P.A.Monson Title: *A generalized Van der Waals theory of solid-fluid equilibria for nonspherical molecules*. Journal: Molec.Phys. **79**, 1063–1072, (1993).
- 
22. AUTHORS : C.Vega , R.D.Kaminsky y P.A.Monson Title: *Adsorption of fluids in disordered porous media from integral equation theory* Journal: Journal of Chemical Physics **99**, 3003–3013 (1993).
- 
23. AUTHORS : A.Lopez , C.Vega, J.Freire y S.Lago Title: *Improved results for the potential parameters of methyl and methylene obtained from second virial coefficients of n-alkanes* Journal: Molec.Phys. **80**, 1565–1567, (1993).
- 
24. AUTHORS : C.Vega, S.Lago y B.Garzon Title: *Virial coefficients and equation of state of hard alkane models* Journal: J.Chem.Phys. **100**, 2182–2190, (1994).
- 
25. AUTHORS : C.Vega y S.Lago Title: *A fast algorithm to evaluate the shortest distance between rods* Journal: Computers and Chemistry **18**, 55–59, (1994).
- 
26. AUTHORS : C.Vega y S.Lago Title: *Isotropic-nematic transition of hard polar and nonpolar molecules* Journal: J.Chem.Phys. **100**, 6727–6737, (1994).
-

27. AUTHORS :S.Lago, J.L.Lopez-Martin, B.Garzon y C.Vega Title: *Vapor-liquid equilibrium from a simple thermodynamic perturbation theory* Journal:*J.Phys.Chem.* **98**, 5355–5361 , (1994).
- 
28. AUTHORS :B.Garzon, S.Lago y C.Vega, E.de Miguel y L.F.Rull Title: *Computer simulation of vapor-liquid equilibria of linear quadrupolar fluids. Departures from the principle of corresponding states* Journal:*J.Chem.Phys.* **101**, 4166–4176, (1994).
- 
29. AUTHORS :C.Vega,S.Lago y B.Garzon Title: *Linear Hard spheres models:Virial coefficients and equation of state* Journal:*Molec.Phys.* **82**, 1233–1247, (1994).
- 
30. AUTHORS :C.Vega, S.Lago y B.Garzon Title: *Liquid vapor equilibria of polar fluids from a van der Waals like theory*. Journal:*J.Phys.Chem.***98**,11181-11192,(1994).
- 
31. AUTHORS : B.Garzon, S.Lago y C.Vega Title: *Reaction Field simulations of the vapor-liquid equilibria of dipolar fluids : Does the reaction field dielectric constant affect the coexistence properties ?* Journal:*Chem.Phys.Lett.* **231**,366–372, (1994).
- 
32. AUTHORS :C.Vega y P.A.Monson Title: *Solid fluid equilibria for quadrupolar hard dumbbells via Monte Carlo simulation* Journal: *J.Chem.Phys.* **102**,1361–1372, (1995).
- 
33. AUTHORS :P.Padilla y C.Vega Title: *Packing effects on the conformational equilibrium of alkanes* Journal:*Molec.Phys.* **84**, 435–450, (1995).
- 
34. AUTHORS :C.Vega, L.F.Rull y S.Lago Title: *Determination of the Fisher Widom line for systems interacting through short ranged potentials* Journal:*Phys.Rev.E.* **51**, 3146–3155, (1995).
- 
35. AUTHORS :B.Garzon, S.Lago , C.Vega, y L.F.Rull Title: *Computer simulation of vapor-liquid equilibria of linear dipolar fluids. Departures from the principle of corresponding states* Journal:*J.Chem.Phys.* **102**, 7204–7215, (1995).
- 
36. AUTHORS :C.Vega, B.Garzon, L.G.McDowell y S.Lago Title: *The vapour-liquid equilibria of propane and n-alkane conformers* Journal:*Molec.Phys.* **85**, 679-699, (1995).
- 
37. AUTHORS :C.Vega and P.A.Monson Title: *Solid-liquid equilibrium for quadrupolar molecules* Journal:*Molec.Phys.* **85**,413–421, (1995).
- 
38. AUTHORS :A.Gil Villegas, C.Vega, F.del Rio y A.Malijevsky Title: *Structure of variable-width square-well fluids from the Reference Hypernetted Chain equation* Journal: *Molec.Phys.* **86**,857–864, (1995).
- 
39. AUTHORS : C.Vega ,L.G.MacDowell and P.Padilla Title: *Equation of state for hard n-alkane models: Long chains* Journal: *Journal of Chemical Physics* **104**, 701–713 (1996).
- 
40. AUTHORS :L.F.Rull, C.Vega and S.Lago Title: *Absence of criticality in the Reference Hypernetted Chain Equation* Journal:*Molec.Phys.* **87**, 1235–1242, (1996).
- 
41. AUTHORS :A.Gil Villegas, F.del Rio y C.Vega Title: *Thermodynamics of fluids from equivalence of collision properties* Journal: *Phys.Rev.E* **53**, 2326-2336, (1996).
-

42. AUTHORS :X.Cottin, E.P.A.Paras, C.Vega and P.A.Monson Title: *Fluid-solid Equilibrium : New perspectives from molecular theory* Journal: Fluid Phase Equilibria **117**, 114–125, (1996).
- 
43. AUTHORS :C.Vega and L.G.MacDowell Title: *Understanding the critical properties of chain molecules* Journal: Molec.Phys. **88**,1575–1602, (1996).
- 
44. AUTHORS : C.Vega y A.Lopez Rodriguez Title: *Second virial coefficient, critical temperatures and shape of n-alkanes* Journal: Journal of Chemical Physics **105**, 4223–4233 (1996).
- 
45. AUTHORS :C.Vega, F.Bresme and J.L.F.Abascal Title: *The fluid solid equilibrium of charged hard spheres* Journal: Phys.Rev.E **54**, 2746–2760, (1996).
- 
46. AUTHORS :C.Vega, B.Garzon, L.G.MacDowell, P.Padilla, S.Calero and S.Lago Title: *The vapour-liquid equilibrium of n-alkanes* Journal:J.Phys.Condens.Matter **8**, 9643–9648, (1996).
- 
47. AUTHORS : P.Padilla and C.Vega Title: *n-alkanes in random porous media: Can we regard the system as a binary equilibrium mixture ?* Journal: Journal of Chemical Physics **106**, 1997–2011 (1997).
- 
48. AUTHORS : C.Vega Title: *Virial coefficient and equation of state of hard ellipsoids* Journal:Molec.Phys. **92**, 651–665, (1997).
- 
49. AUTHORS :C.Vega and P.A.Monson Title: *Plastic Crystal Phases of hard dumbbells and hard spherocylinders* Journal:J.Chem.Phys. **107**, 2696–2697,(1997).
- 
50. AUTHORS : S. Lago, B.Garzon, S. Calero and C.Vega Title: *Accurate simulations of the vapor-liquid equilibrium of important organic solvents and other diatomics* Journal:J.Phys.Chem. **101**, 6763–6771, (1997).
- 
51. AUTHORS :C.Vega Title: *The phase diagram of mixtures of hard spheres in the limit of infinite size ratio* Journal:J.Chem.Phys. **108**, 3074–3075, (1998).
- 
52. AUTHORS :C.Vega, B.Garzon,S.Lago and P.A.Monson Title: *Understanding the phase diagram of quadrupolar fluids* Journal:J.Mol.Liq. **76**, 157–169, (1998).
- 
53. AUTHORS :P.Padilla, O.Pizio, A.Trokhymchuk and C.Vega Title: *Adsorption of dimerizing and dimmer fluids in disordered porous media* Journal:J.Phys.Chem. **102**,3012–3017, (1998).
- 
54. AUTHORS : L.G.MacDowell and C.Vega Title: *The second virial coefficient of hard alkane models* Journal: Journal of Chemical Physics **109**, 5670–5680, (1998).
- 
55. AUTHORS : L.G.MacDowell and C.Vega Title: *Vapour-liquid equilibria of linear and branched alkanes from perturbation theory* Journal: Journal of Chemical Physics **109**, 5681–5690, (1998).
- 
56. AUTHORS :P.Padilla, C.Vega, O.Pizio and A.Trokhymchuk Title: *The structure and adsorption of diatomic fluids in disordered porous media: A MC study.* Journal: Molecular Physics **95** , 701–712, (1998).
- 
57. AUTHORS :C.Vega and P.A.Monson Title: *Solid-Fluid equilibrium for a molecular model with short ranged directional forces* Journal:Journal of Chemical Physics **109**, 9938–9949 , (1998).
-

58. AUTHORS :B.Garzon, S.Lago, C.Vega. Title: *Monte Carlo simulations of dipolar and quadrupolar linear Kihara fluids. A test of thermodynamic perturbation theory* Journal: *Molecular Physics* **96** , 123–132 , (1999).
- 
59. AUTHORS :A.Lopez Rodriguez, C.Vega and J.J.Freire Title: *Determination of potential parameters for alkanes* Journal: *J.Chem.Phys.* **111** , 438–439 , (1999).
- 
60. AUTHORS : L.G.MacDowell, C.Vega and A.L.Rodriguez Title: *Critical properties of mixtures of alkanes from perturbation theory* Journal: *J.Chem.Phys.* **111** , 3183–3191 , (1999).
- 
61. AUTHORS :C.Vega,L.G.MacDowell and A.L.Rodriguez. Title: *Excess properties of mixtures of n-alkanes from perturbation theory* Journal: *J.Chem.Phys.* **111** , 3192–3202 , (1999).
- 
62. AUTHORS :A.P.Malanoski,C.Vega and P.A.Monson Title: *An application of Cell Theory to Molecular Models of n-alkane solids* Journal: *Molecular Physics* **98** , 363–370, (2000).
- 
63. AUTHORS :L.G.MacDowell, M.Muller, C.Vega and K.Binder Title: *Equation of state and critical behavior of polymer models: A quantitative comparison between Wertheim's thermodynamic perturbation theory and computer simulations* Journal: *J.Chem.Phys.* **113** , 419–433 , (2000).
- 
64. AUTHORS :C.Vega Title: *Evaluating virial coefficients for multicomponent mixtures: hard sphere mixtures and flexible chains* Journal: *Molecular Physics* **98**, 973–985 , (2000).
- 
65. AUTHORS :C.Vega and L.G.MacDowell Title: *Critical temperature of infinitely long chains from Wertheim's perturbation theory* Journal: *Molecular Physics* **98** ,1295–1308 , (2000).
- 
66. AUTHORS :F.Bresme, C.Vega and J.L.F.Abascal Title: *Order-disorder transition in the solid phase of a charged hard sphere model* Journal: *Phys.Rev.Lett.* **85**, 3217–3220 , (2000).
- 
67. AUTHORS :C.Vega, J.M.Labaig, L.G.MacDowell and E.Sanz Title: *The virial coefficients of the pearl-necklace model* Journal: *J.Chem.Phys.* **113** , 10398–10409 , (2000).
- 
68. AUTHORS : C.Menduina, C.McBride y C.Vega Title: *The second virial coefficient of quadrupolar two center Lennard-Jones models* Journal: *Physical Chemistry and Chemical Physics* **3** , 1289–1296 , (2001).
- 
69. AUTHORS :C.McBride, C.Vega y L.G.MacDowell Title: *Isotropic-nematic transition : a study of the influence of intra-molecular flexibility using a fused hard sphere model.* Journal: *Physical Review E* **64** , 011703-1–011703-14 , (2001).
- 
70. AUTHORS :C.Vega y L.G.MacDowell Title: *Extending Wertheim's theory to the solid phase: the freezing of the pearl-necklace model* Journal: *J.Chem.Phys.* **114** , 10411–10418 , (2001).
- 
71. AUTHORS :C.Vega ,C.McBride y L.G.MacDowell Title: *Liquid crystal phase formation for the linear tangent hard sphere model from Monte Carlo simulations* Journal: *J.Chem.Phys.* **115** , 4203–4211 , (2001).
- 
72. AUTHORS : L.G.MacDowell, C.Vega y E.Sanz Title: *Equation of state of model branched alkanes: theoretical predictions and configurational bias Monte Carlo simulations* Journal: *J.Chem.Phys.* **115** , 6220–6235 , (2001).
- 
73. AUTHORS : C.McBride y C.Vega Title: *Fluid-solid equilibrium for two dimensional hard disk chains from Wertheim's perturbation theory* Journal: *Journal of Chemical Physics* **116** , 1757–1759 (2002).
-

74. AUTHORS : C.Vega C.McBride and L.G.MacDowell Title: *The effect of flexibility on the phase diagram of simple molecular models* Journal: Physical Chemistry and Chemical Physics **4** , 853–862 (2002).
- 
75. AUTHORS : C.Vega,F.J.Blas y A.Galindo Title: *Extending Wertheim's perturbation theory to the solid phase of Lennard-Jones chains. Determination of the global phase diagram.* Journal: Journal of Chemical Physics **116** , 7645–7655, (2002).
- 
76. AUTHORS : C.Vega,C.McBride Title: *Scaling laws for the equation of state of flexible and linear tangent hard sphere chains.* Journal: Physical Review E **65** , 052501–052504, (2002).
- 
77. AUTHORS : C.Vega,C.McBride, C.Menduina Title: *The second virial coefficient of the dipolar two center Lennard-Jones model.* Journal: Physical Chemistry and Chemical Physics **4** , 3000-3007, (2002).
- 
78. AUTHORS : J.Largo, C.Vega , L.G.MacDowell and J.R.Solana Title: *A computer simulation study of racemic mixtures* Journal: Molecular Physics **100** , 2397–2415 (2002).
- 
79. AUTHORS : E.de Miguel and C.Vega Title: *The global phase diagram of the Gay Berne model* Journal: Journal of Chemical Physics , **117** , 6313–6322 (2002).
- 
80. AUTHORS : C.McBride and C.Vega Title: *A Monte Carlo study of the influence of molecular flexibility on the phase diagram of a fused hard sphere model* Journal: Journal of Chemical Physics ,**117** , 10370–10379, (2002).
- 
81. AUTHORS : F.J.Blas,A.Galindo y C.Vega Title: *Study of the solid-liquid-vapor phase equilibria of flexible chain molecules using Wertheim's thermodynamic perturbation theory* Journal: Molecular Physics ,**101**, 449–458, 1016 (2003).
- 
82. AUTHORS : C.Vega,C.McBride, E.de Miguel, F.J.Blas y A.Galindo Title: *The phase diagram of the two center Lennard-Jones model as obtained from computer simulation and from Wertheim's thermodynamic perturbation theory* Journal: Journal of Chemical Physics ,**118**, 10696–10706, (2003).
- 
83. AUTHORS : L.G.MacDowell,C.Menduina, C.Vega y E.de Miguel Title: *The third virial coefficient of diatomic quadrupolar molecules* Journal: Physical Chemistry and Chemical Physics, 2851–2857,(2003).
- 
84. AUTHORS : C.Vega,J.L.F.Abascal, C.McBride, y F.Bresme Title: *The fluid-solid equilibrium for a charged hard sphere model revisited* Journal: Journal of Chemical Physics ,**119**, 964–971, (2003).
- 
85. AUTHORS : E.Sanz, C.McBride y C.Vega Title: *The properties of fully flexible Lennard-Jones chains in the solid phase: Wertheim's TPT1 theory and simulation.* Journal: Molecular Physics, **101**, 2241-2255, (2003).
- 
86. AUTHORS : J.Largo,M.J.Maeso,J.R.Solana, C.Vega y L.G.MacDowell Title: *Bonded hard-sphere theory and computer simulation of the equation of state of linear fused hard sphere fluids.* Journal: Journal of Chemical Physics, **119**,9633–9639,(2003).
- 
87. AUTHORS : F.J.Blas, E.Sanz, C.Vega y A.Galindo Title: *Fluid-solid equilibria of flexible and linear rigid tangent chains from Wertheim's thermodynamic perturbation theory* Journal: Journal of Chemical Physics , **119**, 10958–10971, (2003).
- 
88. AUTHORS : L.G.MacDowell,C.Menduina, C.Vega y E.de Miguel Title: *Critical properties of molecular fluids from the virial series* Journal: Journal of Chemical Physics , **119**, 11367–11373, (2003).
-

89. AUTHORS : J.L.F.Abascal, C.Vega, C.McBride y F.Bresme , Title: *Characterization of the order-disorder transition of a charged hard sphere model* Journal: Physical Review E , **68**, 052501–052504, (2003)
- 
90. AUTHORS : C.Vega,L.G.MacDowell, C.MacBride, E.Sanz, F.J.Blas y A.Galindo Title: *Molecular modeling of flexible molecules: vapor-liquid and fluid-solid equilibria.* Journal: Journal of Molecular Liquids ,**113**, 37–51, ,(2004).
- 
91. AUTHORS : A.Galindo, C.Vega, E.Sanz, L.G.MacDowell, E.de Miguel y F.J.Blas Title: *Computer simulation study of the global phase behaviour of linear rigid Lennard-Jones chain molecules: Comparison with flexible model* Journal: J.Chem.Phys. ,**120**, 3957–3968, (2004).
- 
92. AUTHORS : E.Sanz,C.Vega, J.L.F.Abascal and L.G.MacDowell Title: *The phase diagram of water from computer simulation* Journal: Physical Review Letters ,**92**, 255701,(2004).
- 
93. AUTHORS : E.Sanz,C.Vega, J.L.F.Abascal and L.G.MacDowell Title: *Tracing the phase diagram of the TIP4P model of water* Journal: J. Chem. Phys. **121**, 1165-1166 (2004).
- 
94. AUTHORS : L.G.MacDowell, E.Sanz, C.Vega and J.L.F.Abascal Title: *Combinatorial entropy and phase diagram of partially ordered ice phases* Journal: J. Chem. Phys. **121**, 10145-10158 (2004).
- 
95. AUTHORS : Carl Mc Bride, Carlos Vega, Eduardo Sanz, Jose L. F. Abascal Title: *Formation of high density amorphous ice by decompression of ice VII and ice VIII at 135 K.* Journal: J. Chem. Phys. **121**, 11907–11911 (2004).
- 
96. AUTHORS : C.McBride,C.Vega, E.Sanz,C.Vega, J.L.F.Abascal y L.G.MacDowell Title: *The range of meta stability of ice-water melting for two simple models of water* Journal: Molecular Physics , **103**, 1–5, (2005).
- 
97. AUTHORS : C.Vega, E.Sanz y J.L.F.Abascal Title: *The melting point of the most popular models of water* Journal: Journal of Chemical Physics , **122**,114507, (2005).
- 
98. AUTHORS : C.Vega, C.McBride, E.Sanz, J.L.F.Abascal Title: *Radial distribution functions and densities for SPC/E, TIP4P and TIP5P models for liquid water and ices Ih,Ic, II, III, IV, V, VI, VII, VIII, IX, XI and XII* Journal: Physical Chemistry Chemical Physics , **7**,1450–1456, (2005).
- 
99. AUTHORS : J.L.F.Abascal, E.Sanz, R.Garcia y C.Vega Title: *A potential model for the study of ices and amorphous water: TIP4P/Ice* Journal: Journal of Chemical Physics , **122**,234511, (2005).
- 
100. AUTHORS : C.McBride, C.Vega, y E.Sanz Title: *Non-Markovian melting: a novel procedure to generate initial liquid like phases for small molecules for use in computer simulation studies.* Journal: Computer Physics Communications , **170**, 137–143, (2005).
- 
101. AUTHORS : C.Vega y J.L.F.Abascal Title: *Relation between the melting temperature and the temperature of maximum density for the most common models of water* Journal: Journal of Chemical Physics , **123**, 144504, (2005).
- 
102. AUTHORS : C.Vega , J.L.F.Abascal, E.Sanz, L.G.MacDowell y C.McBride Title: *Can simple models describe the phase diagram of water ?* Journal: Journal of Physics Condensed Matter , **17**, S3283–S3288, (2005).
- 
103. AUTHORS : J.L.F.Abascal y C.Vega Title: *A general purpose model for the condensed phases of water: TIP4P/2005* Journal: Journal of Chemical Physics , **123**, 234505, (2005).
-

104. AUTHORS : R.G.Fernandez, J.L.F.Abascal y C.Vega Title: *The melting point of ice Ih for common water models calculated from direct coexistence of the solid-liquid interface* Journal: *Journal of Chemical Physics* , **124**, 144506, (2006).
- 
105. AUTHORS : C.Vega, J.L.F.Abascal y I.Nezbeda Title: *Vapor liquid equilibria from the triple point up to the critical point for the new generation of TIP4P like models: TIP4P/Ew, TIP4P/2005 and TIP4P/Ice* Journal: *Journal of Chemical Physics* , **125**, 034503, (2006).
- 
106. AUTHORS : H.Docherty, A.Galindo, C.Vega y E.Sanz Title: *A potential model for methane in water describing correctly the solubility of the gas and the properties of the methane hydrate* Journal: *Journal of Chemical Physics* , **125**, 074510, (2006).
- 
107. AUTHORS : M.Martin-Conde, C.Vega y L.G.MacDowell Title: *Computer simulation of two new solid phases of water: ice XIII and ice XIV* Journal: *Journal of Chemical Physics* , **125**, 116101, (2006).
- 
108. AUTHORS : J.L.F. Abascal, R.G. Fernandez, C.Vega y M.A.Carignano Title: *The melting temperature of the six site potential model of water* Journal: *Journal of Chemical Physics* , **125**, 166101, (2006).
- 
109. AUTORES (p.o. de firma): C. Vega and P. A. Monson TÍTULO: *Solid-fluid equilibrium for a molecular model with short ranged directional forces (erratum)* REVISTA: *Journal of Chemical Physics* , 125, 109901-1,109901-2, (2006). CLAVE: A
- 
110. AUTHORS : C.Vega , M.Martin-Conde y A.Patrykiejew Title: *Absence of superheating for ice Ih with a free surface: a new method of determining the melting point of different water models.* Journal: *Molecular Physics* , **104**, 3583–3592 (2006).
- 
111. AUTHORS : E.Sanz y C.Vega TITLE: *Solubility of KF and NaCl in water by molecular simulation* JOURNAL: *J.Chem.Phys.* , **126**, 014507, (2007).
- 
112. AUTHORS : C.Vega y E.de Miguel TITLE: *The surface tension of the most popular models of water by using the extended Widom method* JOURNAL: *J.Chem.Phys.* , **126**, 154707, (2007).
- 
113. AUTHORS : J.L.F.Abascal y C.Vega TITLE: *The melting point of hexagonal ice (Ih) is strongly dependent on the quadrupole of the water models* JOURNAL: *Physical Chemistry Chemical Physics* , **9**, 2775-2778 , (2007).
- 
114. AUTHORS : J.L.F.Abascal y C.Vega TITLE: *Dipole-Quadrupole force ratios determine the ability of potentials models to describe the phase diagram of water* JOURNAL: *Physical Review Letters* , **98**, 237801 , (2007).
- 
115. AUTHORS : H.Docherty, A.Galindo, C.Vega y E.Sanz TITLE: *An investigation of the salting out of methane from aqueous electrolyte solutions using computer simulations* JOURNAL: *J.Phys.Chem.B* , **111**, 8993-9000, (2007).
- 
116. AUTHORS : E.G.Noya, C.Vega , J.P.K.Doye and A.A.Louis TITLE: *Phase diagram of model anisotropic particles with octahedral symmetry* JOURNAL: *J.Chem.Phys.* , **127**, 054501, (2007).
- 
117. AUTHORS : J.L.Aragones, J.L.F.Abascal, E.G.Noya y C.Vega TITLE: *Properties of ices at 0 K: a test of water models* JOURNAL: *J.Chem.Phys.* , **127**, 154518 , (2007).
- 
118. AUTHORS : C.Vega and E.G.Noya TITLE: *Revisiting the Frenkel-Ladd method to compute the free energy of solids: the Einstein molecule approach* JOURNAL: *J.Chem.Phys.* , **127**, 154113 , (2007).
-

119. AUTHORS : E.G.Noya, C.Menduiña, J.L.Aragones y C.Vega TITLE: *Equation of state, thermal expansion coefficient and isothermal compressibility for ices I<sub>h</sub>, II, III, V and VI, as obtained from computer simulation* JOURNAL: J.Phys.Chem.B , **111**, 15877-15888 , (2007).
- 
120. AUTHORS : J.L.F.Abascal y C.Vega TITLE: *The water forcefield: importance of dipolar and quadrupolar interactions* JOURNAL: J.Phys.Chem.C , **111**, 15811-15822 , (2007).
- 
121. AUTHORS : J.L.F. Abascal, R. García Fernández, L.G. MacDowell, E. Sanz and C. Vega TITLE: *Ice: a fruitful source of information about liquid water* JOURNAL: J.Mol.Liq. , **136**, 214-220 , (2007).
- 
122. AUTHORS : J.B.Caballero, E.G.Noya y C.Vega TITLE: *Complete phase behaviour of the symmetrical colloidal electrolyte* JOURNAL: J.Chem.Phys. , **127**, 244910-1-244910-7 , (2007).
- 
123. AUTHORS (p.o. de firma): C.Vega, E.Sanz, J.L.F.Abascal and E.G.Noya TITLE: *Determination of phase diagrams via computer simulation: methodology and applications to water, electrolytes and proteins* JOURNAL: J.Phys.Condens.Matter **20**, 153101, (2008).
- 
124. AUTHORS (p.o. de firma): E.G.Noya , C.Vega y E.de Miguel TITLE: *Determination of the melting point of hard spheres from direct coexistence simulation methods* JOURNAL: J.Chem.Phys. **128**, 154507, (2008).
- 
125. AUTHORS (p.o. de firma): M.M.Conde, C.Vega y A.Patrykiejew TITLE: *The thickness of a liquid layer on the free surface of ice as obtained from computer simulation.* JOURNAL: J.Chem.Phys. **129**, 014702, (2008).
- 
126. AUTHORS (p.o. de firma): F. Gamez, S. Lago, B.Garzon, P.Merkling and C.Vega TITLE: *Vapor-liquid equilibrium of fluids composed by oblate molecules.* JOURNAL: Molecular Physics , **106**, 1331-1339, (2008).
- 
127. AUTHORS (p.o. de firma): E.G.Noya, M.M.Conde and C.Vega TITLE: *Computing the free energy of molecular solids by the Einstein molecule approach: Ices XIII and XIV and a simple model of proteins.* JOURNAL: J.Chem.Phys. , **129**, 104704-1, 104704-16, (2008).
- 
128. AUTHORS (p.o. de firma): C.Vega, J.L.F.Abascal, M.M.Conde and J.L.Aragones TITLE: *What ice can teach us about water interactions : a critical comparison of the performance of different water models* JOURNAL: Faraday Discussions , **141**, 251-276, (2009).
- 
129. AUTHORS (p.o. de firma): J.L.Aragones, M.M. Conde , E.G.Noya and C.Vega TITLE: *The phase diagram of water at high pressures as obtained by computer simulations of the TIP4P/2005 model: the appearance of a plastic crystal phase* JOURNAL: Phys.Chem.Chem.Phys. , **11**, 543-555, (2009).
- 
130. AUTHORS (p.o. de firma): J.L.F.Abascal, E.Sanz and C.Vega TITLE: *Triple points and coexistence properties of the dense phases of water calculated using computer simulation* JOURNAL: Phys.Chem.Chem.Phys. , **11**, 556-562 , (2009).
- 
131. AUTORES (p.o. de firma): H.L.Pi, J.L.Aragones, C.Vega, E.G.Noya, J.L.Abascal , M.A.Gonzalez and C.McBride TÍTULO: *Anomalies in water as obtained from computer simulations of the TIP4P/2005 model: density maxima, and density, isothermal compressibility and heat capacity minima* REVISTA: Molec. Phys. , **107**, 365, (2009). CLAVE: A
- 
132. AUTORES (p.o. de firma): J.L.Aragones y C.Vega TÍTULO: *Plastic crystal phases of simple water models* REVISTA: J.Chem.Phys. , **130**, 244504, (2009). CLAVE: A
-

133. AUTORES (p.o. de firma): C.McBride,C.Vega,E.G.Noya,R.Ramirez and L.M.Sese TÍTULO: *Quantum contribution in the ice phases: the path to a newempirical model for water: TIP4PQ/2005* REVISTA: J.Chem.Phys. , 131, 024506 , (2009). CLAVE: A
- 
134. AUTORES (p.o. de firma): M.M.Conde, C. Vega, G.A.Tribello and B.Slater TÍTULO: *The phase diagram of water at negative pressures: Virtual ices* REVISTA: J.Chem.Phys. , 131, 034510 , (2009). CLAVE: A
- 
135. AUTORES (p.o. de firma): E.G.Noya ,C.Vega, L.M.Sese y R.Ramirez TÍTULO: *Quantum effects on the maximum in density of water as described by the TIP4PQ/2005 model* REVISTA: J.Chem.Phys. , 131 124518 (2009). CLAVE: A
- 
136. AUTORES (p.o. de firma): C.Vega , M. M. Conde , C. McBride , J.L.F. Abascal , E.G. Noya , R.Ramirez y L.M.Sese TÍTULO: *Heat capacity of water: a signature of nuclear quantum effects* REVISTA: J.Chem.Phys. , 132, 046101 (2010) . CLAVE: A
- 
137. AUTORES (p.o. de firma): B. Gonzalez , E.G.Noya , C. Vega y L. M. Sese TÍTULO: *Nuclear Quantum Effects in Water Clusters: The Role of the Molecular Flexibility* REVISTA: J.Phys.Chem. B , 114, 2484-2492 (2010). CLAVE: A
- 
138. AUTORES (p.o. de firma): D.G.Salgado y C. Vega TÍTULO: *Melting point and phase diagram of methanol as obtained from computer simulations of the OPLS model* REVISTA: J.Chem.Phys. , 132 , 094505 , (2010). CLAVE: A
- 
139. AUTORES (p.o. de firma): M. M. Conde, C.Vega, C. McBride, E.G.Noya, R.Ramirez y L. M. Sese TÍTULO: *Can gas hydrate structures be described using classical simulations?* REVISTA: J.Chem.Phys. , 132, 114503 , (2010). CLAVE: A
- 
140. AUTORES (p.o. de firma): L. G. MacDowell y C. Vega TÍTULO: *Dielectric Constant of Ice Ih and Ice V: A Computer Simulation Study* REVISTA: J. Phys. Chem. B, , 114, 6089, (2010). CLAVE: A
-

## **12. Conferences**

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**1. AUTHORS:**S.Lago, P.Padilla y C.Vega

**Title:** Gas-gas equilibria from a thermodynamical perturbation theory

**CONGRESS :** InternacionaL 9th IUPAC Conference on Chemical Thermodynamic

**Place :**Lisboa, Portugal

**DATE :** Fecha: Julio 1986

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**2. AUTHORS:** P.Padilla, C.Vega S.Lago y P.Sevilla

**Title:** A bridge between Fischer and Boublik thermodynamic perturbation theories

**Contribution :** Poster

**CONGRESS :** InternacionaL . 6th International Conference on Mixtures of non electrolites and Intermolecular Interactions

**Place :**Merseburg, Alemania

**DATE :** Agosto 1988

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**3. AUTHORS:** P.Sevilla, S.Lago ,P.Padilla y C.Vega

**Title:** Numerical solution of the Percus-Yevick equation for hard and soft spherocylinders

**Contribution :** Invited Talk

**CONGRESS :** InternacionaL . 10th IUPAC Conference on Chemical Thermodynamics

**Place :**Praga, Checoslovaquia

**DATE :** Agosto 1988

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**4. AUTHORS:** C.Vega y D.Frenkel

**Title:** Monte Carlo study of rod like Kihara molecules

**Contribution :** Talk

**CONGRESS :** InternacionaL . NATO ASI

**PLACE:**Bath, Reino Unido

**DATE :** Septiembre 1988

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**5. AUTHORS:** P.Padilla, C.Vega, S.Lago, A.Alguacil, B.Garzón y P.Saiz

**Title:** Bridge perturbation theory applied to hidrocarbons: results for linear carbon skeleton and some hints for non-linear

**Contribution :** Poster

**CONGRESS :** InternacionaL . 4th International Conference on Thermodynamic of solution of non-electrolites

**Place :**Santiago de Compostela, España

**DATE :** Septiembre 1989

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**6. AUTHORS:** C.Vega ,S.Lago y P.Padilla

**Title:** Propane and butane conformers: preliminary results from a perturbation theory

**Contribution :** Poster

**CONGRESS :** InternacionaL . 3th Liblice Conference on the Statistical Mechanics of Liquids

**Place :**Praga, Checoslovaquia

**DATE :** Mayo 1990

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**7. AUTHORS:**S.Lago, C.Vega, P.Padilla y B.Garzón

**Title:** Vapor-liquid equilibrium of molecular liquids with different geometries from perturbation theory

**Contribution :** Poster

**CONGRESS :** InternacionaL . First Liquid Matter Conference of the European Physical Society

**Place :**Lyon, Francia

**DATE :** Julio 1990

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**8. AUTHORS:** S.Lago ,C.Vega , B.Garzón , P.Padilla y J.L.Lopez Martin

**Title:** Conformational shift in liquid state and liquid-vapor equilibrium for n-butane from perturbation theory

**Contribution :** Poster

**CONGRESS :** InternacionaL . Faraday Simposium 27 on the conformations of flexible molecules in fluid phases

**Place :**Southampton, Reino Unido

**DATE :** Diciembre 1991

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9. AUTHORS:C.Vega ,S.Lago, E.de Miguel y L.F.Rull  
Title: Liquid vapor equilibria of linear Kihara molecules  
Contribution : Poster  
CONGRESS : Internacional. 18th Statphys  
Place :Berlin, Alemania  
DATE : Agosto 1992

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10. AUTHORS: C.Vega  
Title: **Recent progress in understanding liquids**  
Contribution : **Conferencia plenaria Invitada**  
Place : Club de profesores de la Universidad de Harvard, USA  
DATE : Marzo 1992

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11. AUTHORS: C.VEGA,E.P.A.PARAS Y P.A.MONSON  
Title: **SOLID-FLUID EQUILIBRIA IN SYSTEMS OF HARD DIATOMICS**  
Contribution : **COMUNICACIÓN ORAL (30 MINUTOS)**  
CONGRESS: *Internacional. American Institute of Chemical Engineering Annual Meeting*  
Place : MIAMI, FLORIDA , USA  
Date : 1992

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12. AUTHORS:A.Gil Villegas, F.del Rio y C.Vega  
Title: Solution of the RHNC equation for the square well fluid  
Contribution: Poster  
CONGRESS :Nacional. XXXV congreso de la Sociedad Mejicana de Física  
Place :Puebla, México  
DATE : Octubre 1992

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13. AUTHORS: J.L.L.Martin, B.Garzén, S.Lago, E.Lopez y C.Vega  
Title: Algunos resultados de interés en Ingeniería Química con bases relativamente rigurosas de Mecánica Estadística  
Contribution: Poster  
CONGRESS :Nacional. Fisica Estadistica 93  
Place :El Escorial, Madrid  
DATE : Mayo 1993

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14. AUTHORS: B.Garzon, E.de Miguel, C.Vega, L.F.Rull y S.Lago  
Title: Vapor-liquid equilibria of dipolar linear Kihara fluids  
Contribution: Poster  
CONGRESS : Internacional. Second liquid Matter Conference of the European Physical Society  
Place : Florencia, Italia  
DATE : Septiembre 1993

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15. AUTHORS: C.Vega  
Title: Vapor liquid equilibrium of dipolar linear Kihara fluids Contribution: Poster  
CONGRESS : Internacional. IV Liblice Conference on the Statistical Mechanics of Liquids  
Place :Checoslovaquia  
DATE : Junio 1994

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16. AUTHORS: B.Garzon, C.Vega, S.Lago y L.F.Rull  
Título: Simulación del equilibrio líquido vapor de fluidos lineales dipolares y cuadrupolares.  
Contribution: Talk invitada  
CONGRESS : Internacional. Equilibrio de Fases (EQUIFASE).  
Place :Caracas, Venezuela  
DATE : Junio 1995

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17. AUTHORS: C.VEGA y P.A.MONSON  
Title: **EQUILIBRIO LÍQUIDO-SÓLIDO DE SISTEMAS MOLECULARES E IÓNICOS**  
Contribution: **COMUNICACIÓN ORAL (30 MINUTOS)**  
CONGRESS: *Nacional. FÍSICA ESTADÍSTICA 96*

Place : ZARAGOZA

AÑO: 1996

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**18. AUTHORS: C.VEGA**

Title: THE FLUID-SOLID EQUILIBRIUM OF IONIC SYSTEMS

Contribution: COMUNICACIÓN ORAL (30 MINUTOS)

CONGRESS: *Internacional. PRE-LIQUID MATTER CONFERENCE*

Place : Universidad de Sheffield (REINO UNIDO)

AÑO: 1996

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**19. AUTHORS: C.VEGA,B.GARZON,L.G.MACDOWELL,SLAGO Y S.CALERO**

Title: THE VAPOUR-LIQUID EQUILIBRIUM OF N-ALKANES

Contribution: COMUNICACIÓN ORAL (30 MINUTOS)

CONGRESS: *Internacional. THIRD EUROPEAN LIQUID MATTER CONFERENCE*

Place : NORWICH (REINO UNIDO)

DATE : 1996

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**20. AUTHORS: P.Padilla y C.Vega**

Title: A computer simulation study of the similarities between a system of fluid alkanes and a mixture of alkanes and spherical particles

Contribution : Talk invitada

CONGRESS :Internacional. 10th Nordic Simposium on Computer Simulation

Place :Tallin, Estonia

DATE : Julio 1996

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**21. AUTHORS: C.VEGA,B.GARZON,S.LAGO AND P.MONSON**

Title: UNDERSTANDING THE PHASE DIAGRAM OF QUADRUPOLAR FLUIDS

Contribution: CONFERENCIA INVITADA (1 HORA)

CONGRESS: *Internacional. XXVI STATISTICAL MECHANICS MEETING*

Place : CUERNAVACA ,MEXICO.

AÑO: 1997

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**22. AUTHORS: C.Vega, L.G.MacDowell y P.Padilla**

Title: Coeficientes del virial y ecuación de estado de moléculas duras flexibles

Contribution: Poster

CONGRESS : Nacional. Física Estadística 97

Place : Getafe, España

DATE : Septiembre 1997

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**23. AUTHORS:L.G.MacDowell, C.Vega**

Title: Vapor-Liquid equilibrium of linear and branched alkanes from a mean field perturbation theory

Contribution: Poster

CONGRESS : Nacional. Primera reunión nacional sobre Estado Líquido

Place : Aguadulce, Almería

DATE : Julio 1998

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**24. AUTHORS: L.G.MacDowell y C.Vega**

Title: Vapor-Liquid equilibrium of linear and branched alkanes

Contribution: Poster

CONGRESS : Internacional. European Molecular Liquids Conference

PLACE: Mureau, Austria

DATE : Noviembre 1998

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**25. AUTHORS: L.G.MacDowell, A.L.Rodriguez and C.Vega**

Title: Phase coexistence and critical behavior of linear and branched alkanes mixtures from perturbation theory

Contribution:Poster

CONGRESS : Internacional. Thermodynamics 99

PLACE: Londres, Reino Unido

DATE : Marzo 1999

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26. AUTHORS: C.Vega, J.M.Labaig, L.G.MacDowell  
Title: Second, Third and fourth virial coefficients of polymers: a Monte Carlo study  
Contribution: Poster  
CONGRESS : Internacional. IV Liquid Matter Conference of the European Physical Society PLACE:Granada, España  
DATE : Julio 1999

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27. AUTHORS: C.Vega y P.A.Monson  
Title: Fluid-Solid equilibrium of molecular systems via computer simulation  
Contribution: Poster  
CONGRESS : Internacional. European Research Conference: Solid-Fluid Interfaces 1999  
PLACE:Castelvecchio Pascoli, Italia  
DATE : Septiembre 1999

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28. AUTHORS:C.Vega  
Title: Aplicaciones de la Mecánica Estadística al estudio de hidrocarburos  
Contribution: Talk invitada  
CONGRESS : Primer ciclo de conferencias de Física Básica y Aplicada de la Universidad de Huelva  
PLACE:Huelva, España  
DATE : Mayo 2000

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29. AUTHORS:C.McBride, L.G.MacDowell y C.Vega  
Title: The liquid crystal phase: a study of flexibility using a hard model  
Contribution: Poster  
CONGRESS :Nacional. Fises 2000  
PLACE: Santiago de Compostela, España  
DATE : Septiembre 2000

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30. AUTHORS: C.Menduiña, C.McBride y C.Vega  
Title: Second virial coefficient calculations of quadrupolar linear molecules and their mixtures  
Contribution: Poster  
CONGRESS : Internacional. 16th IUPAC Conference on Chemical Thermodynamics  
PLACE:Halifax, Canada  
DATE : Agosto 2000

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31. AUTHORS: L.G.MacDowell, M.Muller, P.Virnau, C.Vega y K.Binder  
Title: Critical behavior of chain molecules and their mixtures and prediction of the critical point of polyethylene  
Contribution: Comunicación oral  
CONGRESS : Internaciona. Thermodynamics 2001  
PLACE:Bristol, Reino Unido.  
DATE : Abril 2001.

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32. AUTHORS: C.Vega  
Title: **The effect of flexibility on the phase diagram of simple molecular models.**  
Contribution: **Conferencia invitada (1 hora)**  
CONGRESS : Seminarios del Dep.Qímica de la U.Durham.  
PLACE: Universidad of Durham, Reino Unido.  
DATE : Mayo 2001.

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33. AUTHORS:C.Vega  
Title: **Simple models, complex fluids**  
Contribution: **Conferencia plenaria invitada (1 hora)**  
CONGRESS : Internaciona. Global Phase Diagrams, International Bunsen Conference  
PLACE:Colonia, Alemania  
DATE : Agosto 2001

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34. AUTHORS: C.Vega  
Title: **Computer simulations of complex fluids**  
Contribution: **Talk invitada**

**CONGRESS : Internacional. 17th IUPAC Conference on Chemical Thermodynamics**

**PLACE:Rostock, Alemania**

**DATE : Agosto 2002**

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**35. AUTHORS: C.Vega**

**Title: The phase diagram of the restricted primitive model**

**Contribution: Talk invitada**

**CONGRESS : Internacional. Thermodynamics 2003 (Royal Society of Chemistry)**

**PLACE: Cambridge, United Kingdom.**

**DATE : Abril, 2003.**

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**36. AUTHORS: C.Vega, F.J.Blas and A.Galindo**

**Title:Extension of the Thermodynamic Perturbation Theory of Wertheim to Model Solid Phases of Attractive Chain Molecules**

**Contribution: Talk**

**CONGRESS : Internacional. 15th SYMPOSIUM ON THERMOPHYSICAL PROPERTIES**

**PLACE: Boulder, Colorado, USA.**

**DATE : Junio , 2003.**

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**37. AUTHORS: L.G.MacDowell, C.McBride, C.Menduiña, E.Sanz y C.Vega**

**Title: Simulación por ordenador de fluidos moleculares**

**Contribution: Talk**

**CONGRESS : Nacional. Primera reunión de expertos en fluidos comprimidos**

**PLACE: Madrid, Campo de las Naciones.**

**DATE : 12-14 Noviembre 2003.**

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**38. AUTHORS: L.G.MacDowell, C.Vega, P.Virmau, M.Muller and K.Binder**

**Title: Polymer-solvent mixtures: a quantitative comparison between TIPT1 and computer simulation**

**Contribution: Poster**

**CONGRESS : Internacional. SAFT Simposium.**

**PLACE: Barcelona.**

**DATE : 12 Diciembre 2003.**

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**39. AUTHORS: J.L.F.Abasca, E.Sanz, L.G.MacDowell and C.Vega**

**Title: Computer simulation of the phase diagram of water**

**Contribution: Talk invitada**

**CONGRESS : Internacional. Statphys 22.**

**PLACE: Bangalore, India.**

**DATE : 5-9 Julio 2004**

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**40. AUTHORS: E.Sanz, C.Vega, J.L.F.Abasca, L.G.MacDowell and C.McBride**

**Title: Phase diagram, combinatorial entropy and metastability in water.**

**Contribution: Poster.**

**CONGRESS : Internacional. Conference on Disorder, complexity and Biology (DISCOMBO4).**

**PLACE: Varanasi, India.**

**DATE : 12-15 Julio 2004**

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**41. AUTHORS: E.Sanz, C.Vega, J.L.F.Abasca and L.G.MacDowell**

**Title: The phase diagram of water from computer simulation**

**Contribution: Poster**

**CONGRESS : Internacional. SIMU, bridging the scales.**

**PLACE: Genova, Italia.**

**DATE : 29-31 Agosto 2004.**

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**42. AUTHORS: F. J. Blas, A. Galindo, C. Vega, E. Sanz, and E. de Miguel**

**Title: Global phase behaviour of chain molecules: flexible and rigid models**

**Contribution: poster**

**CONGRESS : 10th International Conference on Properties and Phase Equilibria for Product and Process Design, Snowbird**

**PLACE: Utah, USA**

DATE : 16-21 May 2004

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**43. AUTHORS:** J.L.F.Abascal, E.Sanz, C.Vega, C.McBride and L.G.MacDowell

**Title:** What we have learn after three years of simulations of water and ices

**Contribution:** Talk

**CONGRESS :** Thermodynamics 2005 (organizado por la Royal Society of Chemistry)

**PLACE:** Sesimbra, Portugal

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**44. AUTHORS:** C.Vega, E.Sanz, C.McBride, J.L.F.Abascal and L.G.MacDowell

**Title:** Determination of the phase diagram of water from computer simulation

**Contribution:** Talk

**CONGRESS :** 6th Liquid Matter Conference (organizado por la European Physical Society) , Julio 2005

**PLACE:** Utrecht, Holanda

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**45. AUTHORS:** C.Vega

**Title:** The phase diagram of water by computer simulation

**Contribution:** Talk

**CONGRESS :** 7th Liblice Conference on the Statistical Mechanics of Liquids, Junio 2006

**PLACE:** Lednice, Republica Checa

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**46. AUTHORS:** C.Vega,E.Sanz,J.L.F.Abascal,L.G.MacDowell, C.McBride, R.Garcia and M.M.Conde

**Title:** The phase diagram of water from computer simulation

**Contribution:** Talk

**CONGRESS :** Cecam workshop. Patchy colloids, Proteins and Network forming liquids: Analogies and new insights from computer simulations , Junio 2006.

**PLACE:** Lyon, Francia

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**47. AUTHORS:** H.Docherty, A.Galindo, M.M.Conde, E.Sanz y C.Vega

**Title:** A comparison of the statistical associating fluid theory for potentials of variable range to Monte Carlo simulations for electrolyte solutions

**Contribution:** Poster

**CONGRESS :** FOMMS (Foundations of Molecular Modeling and Simulation), Julio 2006

**PLACE:** Washington, Estados Unidos.

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**48. AUTHORS:** J.L.F. Abascal, R. García Fernández, L.G. MacDowell, E. Sanz, C. Vega

**Title:** Ice: A fruitful source of information about liquid water

**Contribution:** Talk

**CONGRESS :** EMLG/JMLG Annual Meeting, Liquids systems under extreme conditions , Septiembre 2006

**PLACE:** Barcelona

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**49. AUTHORS:** C.Vega,E.Sanz,J.L.F.Abascal,L.G.MacDowell, C.McBride, R.Garcia and M.M.Conde

**Title:** Computer simulation studies of the phase diagram of water

**Contribution:** Talk plenaria invitada.

**CONGRESS :** CCP5 Annual meeting, Septiembre del 2006.

**PLACE:** Bradford, Reino Unido

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**50. Authors:** Amparo Galindo , Hugh Docherty, Eduardo Sanz, Carlos Vega y Maria M. Conde

**Title:** NEW POTENTIAL MODELS AND THEORETICAL APPROACHES FOR AQUEOUS SYSTEMS WITH SALTS AND METHANE: HYDRATE FORMATION AND SALTING OUT

**Contribution:** Poster.

**CONGRESS :** PPED (Properties and Phase Equilibria for Product and Process Design, Mayo 2007.

**Place:** Creta, Grecia.

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**51. Autores:** C. Vega

**Título:** Water at interfaces interactions

**Tipo de participación:** Talk Invitada (

**Congreso:** Workshop on Theory and Computer Simulation of Inhomogeneous Fluids

**Lugar de celebración:** Madrid

**Mes:** Mayo      **Año:** 2007

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- 52.** Authors: Carlos Vega, J.L.F.Abascal,E.Sanz,L.G.MacDowell,E.G.Noya,M.M.Conde and J.L.Aragones  
Title: Analysing the performance of water models to describe the phase diagram of water  
Contribution: Talk.  
CONGRESS : Cecam workshop Modelling the structures and reactivity of silica and water: from molecule to macroscale, Septiembre del 2007.  
Place: Lyon, Francia.
- 
- 53.** Authors: E.G.Noya, C.Vega, J.P.K.Doye, A.A.Louis  
Title: Phase diagram of an octahedral anisotropic patchy model potential  
Contribution: Talk.  
CONGRESS : Thermodynamics , Septiembre 2007.  
Place: Paris, Francia.
- 
- 54.** Authors: H. Docherty , A. Galindo , E. Sanz, C. Vega, M. M. Conde  
Title: Hydrate formation and salting out: new potential models for methane in water and aqueous solutions  
Contribution: Talk.  
CONGRESS : Thermodynamics , Septiembre 2007.  
Place: Paris, Francia.
- 
- 55.** Authors: Poster 1. E.G.Noya, C.Vega, J.P.K.Doye, A.A.Louis Poster 2. C. Vega, E. Sanz, J. L. F. Abascal, L. G. MacDowell, E. G. Noya, M. M. Conde, J. L. Aragones Poster 3. J.L. Aragones, E.G. Noya, J.L.F. Abascal, C. Vega Poster 4. M.M. Conde , C. Vega , A. Patrykiejew  
Title: Poster 1. Determination of the phase diagram of a simple model of proteins via computer simulation Poster 2. Determination of the phase diagram via computer simulation: methodology and application to water Poster 3. Properties of ices at 0K A test of water models Poster 4. Absence of superheating for ice Ih with a free surface a new method of determining the melting point of different water models  
Contribution: Posters.  
CONGRESS : Simbioma, Abril , 2008.  
Place: Konstanz, Alemania.
- 
- 56.** Authors: Gary N. I. CLARK, Amparo GALINDO, George JACKSON, Carlos VEGA  
Title: The use of spectroscopic data for the degree of association to determine optimal models for water in theoretical and computer simulation methods.  
Contribution: Poster.  
CONGRESS : Liquid Matter Conference, Julio 2008.  
Place: Lund, Suecia.
- 
- 57.** Authors: J.L. Aragones, E.G. Noya, J.L.F. Abascal, M.M. Conde, C. Vega  
Título: Properties of ices at 0K A test of water models  
Tipo de participación: Talk  
Congreso: CCP5 (Collaborative Computational Project 5 - The Computer Simulation of Condensed Phase)  
Lugar de celebración: Sheffield (Reino Unido) Mes: Julio Año: 2008
- 
- 58.** Authors: C.Vega,J.L.F.Abascal,M.M.Conde and J.L.Aragones  
Title: What ice can teach us about water interactions : a critical comparison of the performance of different water models  
Contribution: Conferenciante invitado.  
CONGRESS : Faraday Discussion , 141 , Agosto 2008.  
Place: Edimburgo, Reino Unido
- 
- 59.** Authors: C.Vega,J.L.F.Abascal,M.M.Conde and J.L.Aragones  
Title: A Successful Model for the Condensed Phases of Water : TIP4P/2005  
Contribution: Talk.  
CONGRESS : AiCHE meeting , Noviembre 2008.  
Place: Philadelphia, USA.
- 
- 60.** Authors: C.Vega  
Title: Simulation studies of water at the vapor-liquid, vapor-solid and liquid-solid interfaces.

Contribution: Talk.

CONGRESS : Ice/Vapor Interface: Molecular Modeling and Experiments Ice workshop , Noviembre 2008.

Place: Praga, Republica Checa.

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**61. Authors:** C.Vega

**Title:** Estudios mediante simulacion por ordenador del diagrama de fases del agua

Contribution: Conferencia invitada.

CONGRESS : Jornadas de Termodinamica, Orense Diciembre, 2009.

Place: Orense, Espana.

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**THESIS SUPERVISED AND FINISHED SUCCESFULLY**

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**Title: TERMODINAMICA ESTADISTICA DE MOLECULAS FLEXIBLES: TEORIA Y SIMULACION**

**PhD Student : LUIS GONZÁLEZ MACDOWELL**

**University : Universidad Complutense**

**Faculty/School : Ciencias Quimicas**

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**Title: EQUILIBRIO TERMODINÁMICO DE SÓLIDOS MEDIANTE SIMULACIÓN MOLECULAR**

**Student : EDUARDO SANTIAGO SANZ GARCIA**

**University : Universidad Complutense**

**Faculty/School : Ciencias Quimicas**

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Publications analysis.

Revista (impacto)	Número
Physical Review Letters(6)	3
Faraday Discussion (5)	1
Journal of Chemical Physics (3.3)	66
Journal of Physical Chemistry (4)	5
Journal of Physical Chemistry B (4)	5
Journal of Physical Chemistry C (4)	2
Physical Review E (2.1)	6
Chemical Physics Letters (2.3)	2
Molecular Physics (1.85)	31
Computer Physics Communications (1.51)	1
Physical Chemistry and Chemical Physics (2.5)	8
J.Phys.Condens.Matter(1.4)	3
Fluid Phase Equilibria(0.8)	1
Journal of Molecular Liquids (1.0)	3
Computers and Chemistry (0.8)	2
Physical Chemistry of Liquids (0.5)	1
TOTAL number of papers :	140

Citation analysis, updated , May 2010.

Total number of citations : 2869

Papers with more than 100 citations : 4

**H (h-index) = 29**

Algorithm search for ISI :

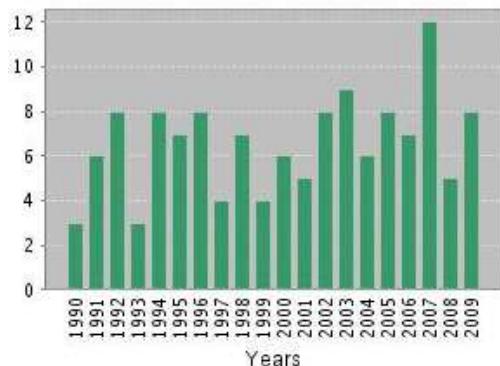
AUTHOR: VEGA C

ADDRESS: quim fis or fac ciencias QUIM and complutense or amherst or bochum or amsterdam

Research ID: <http://www.researcherid.com/rid/C-5455-2009>

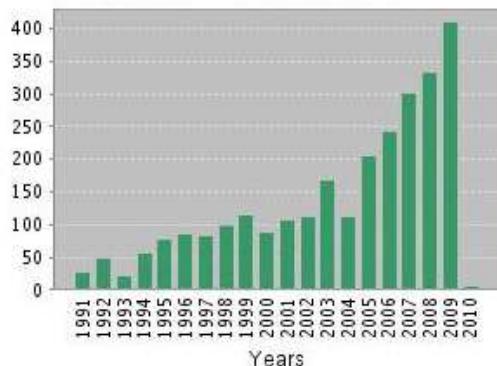
- First prize for bachelor degree in the Faculty of Chemistry in Complutense University.
- First prize for bachelor degree in Chemistry in Spain (for all bachelors in Chemistry of the country obtained in 1987).
- First prize for PhD degree in the Faculty of Chemistry in Complutense University.
- Since January 2007 I belong to the Editorial Board of Molecular Physics.
- I act as referee for the following journals (7-8 papers/year) Journal of Chemical Physics, Journal of Physical Chemistry, Molecular Physics, J.Phys.Condens.Matter, Ind.Engineering Chemistry Research, Physical Review E, Phys.Rev.Lett. , Fluid Phase Equilibria.
- Fulbright post-doctoral fellowship in the United States during the years 1991 and 1992 (after the supervision of Prof. Peter A. Monson ).

### Published Items in Each Year



The latest 20 years are displayed.

### Citations in Each Year



The latest 20 years are displayed.

Results found: 135

Sum of the  
Times Cited [?] : 2,716  
[View Citing Articles](#)  
[View without self-citations](#)

Average  
Citations per  
Item [?] : 20.12  
  
h-index [?] : 28

Figura 1: History of papers and citations according to ISI ( AUTHOR = VEGA C, ADDRESS= quim fis or fac ciencias QUIM and complutense or amherst or bochum or amsterdam )