

## CURRICULUM VITAE

Dr. Francisco Torrens

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Institut Universitari de Ciència Molecular is Excellence Unit *María de Maeztu* MDM-2015-0538 (2015-present).

### PERSONAL INFORMATION:

Born July 26, 1961. Citizenship, Spain. Passport number 22542383-Z. Married, one child.

## EDUCATION:

1. B. Sc., Universitat de València (1979-84), *Adv.* José Sánchez-Marín, *Tit.* Implementación de la Energía de Dispersión en un Modelo Empírico para el Estudio de Asociaciones Moleculares, *Trans.* Implementation of the Dispersion Energy into an Empirical Model for the Study of Molecular Associations.
2. M. Sc., Universitat de València (1985-87).
3. Ph. D., Universitat de València (1985-90), *Adv.* José Sánchez-Marín, *Tit.* Asociaciones Moleculares en Azinas y Macrociclos. Aplicación del Potencial Intermolecular de Fraga, *Transl.* Molecular Associations in Azines and Macrocycles. Application of the Intermolecular Potential of Fraga.
4. Ph. D. Talent Prize, Universitat de València (1991).

#### AWARDS AND HONOURS:

1. Doctoral research grant, *Adv. Francisco Tomás, Tit. Estudio Teórico de Asociaciones Moleculares. Aplicación a Sistemas de Interés Biológico, Trans.* Theoretical Study of Molecular Associations. Application to Systems of Biological Interest, Conselleria de Cultura, Educació i Ciència de la Generalitat Valenciana, 1987-91, 4 years.
2. Valoración Positiva, *Trans.* Positive Valoration, Comisión Nacional de la Actividad Investigadora, Ministerio de Educación y Ciencia, 1987-1993, 1994-1999, 2000-2005, 2006-2011 and 2012-2017.
3. Concessió de Components per Mèrits Docents del Complement Específic, *Trans.* Concession of Components by Educational Excellence of the Specific Complement, Universitat de València, 1988- 1992, 1993-1997, 1998-2002, 2003-2007, 2008-2012 and 2013-2017.
4. Retribucions Addicionals per al Professorat Funcionari de la Universitat de València, *Trans.* Additional Payment for the Official Professorship of the Universitat de València, Comissió Valenciana d'Acreditació i Avaluació de la Qualitat del Sistema Universitari Valencià, 2004-present.
5. Evaluación Positiva como Profesor Ayudante Doctor, Profesor Contratado Doctor y Profesor de Universidad Privada, así como Informe Favorable para la Figura de Profesor Colaborador, *Trans.* Positive Evaluation as Doctor Assistant Professor, Doctor Contracted Professor and Professor of Private University, as well as Favourable Report for the Figure of Collaborator Professor, Comissió Valenciana d'Acreditació i Avaluació de la Qualitat del Sistema Universitari Valencià, 2007.
6. Professor of the Programa de Alto Rendimiento Académico, *Trans.* Programme of High Academic Performance, Generalitat Valenciana–Universitat de València, 2010-present.

#### ANOTHER AWARDS AND HONOURS:

1. Congress grant, *XXI Reunión Bienal Real Sociedad Española de Química*, Santiago de Compostela (A Coruña), September 22-26, 1986.
2. Congress grant, *XVII Congreso Químicos Teóricos de Expresión Latina*, Peníscola (Castelló), September 20-25, 1987.
3. Congress grant, *I Workshop on Quantum Chemistry - IV Reunió del Grup de Química Quàntica de l'Institut d'Estudis Catalans*, Girona, June 12-18, 1988.
4. Summer school grant, *III Europhysics Summer School Chemical Physics: Ion Chemistry*, Universidad Internacional Menéndez Pelayo, Santander, July 4-8, 1988.
5. Congress grant, *NATO-ASI Conference Lower-Dimensional Systems and Molecular Electronics*, NATO Advanced Study Institute, Spetses Island (Athens), June 12-23, 1989.
6. Summer school grant, *European Summerschool Quantum Chemistry*, University of Lund-University of Stockholm, Tjörnar Conference Centre (Lund), August 20-September 1, 1989.
7. Congress grant, *Molecular Graphics: Computer Aided Molecular Design*, University of Porto, Porto, December 18-22, 1989.
8. Membership, *Molecular Graphics and Modelling Network*, University of York, 1990-present.
9. Congress grant, *Colloquy University Pedagogy*, Universitat de Barcelona, Barcelone (Spain), October 17-19, 1990.
10. Subscription grant, *Journal of Chemical Research (Synopsis)*, 1990-91, 1 year.

11. Congress grant, *NATO-ASI Conference Methods in Computational Molecular Physics*, NATO Advanced Study Institute, Bad Windsheim (Nürnberg), July 22-August 2, 1991.
12. Membership grant, *Société Française de Chimie*, 1991-92, 1 year.
13. Congress grant, *I South European Conference on Atomic and Molecular Physics - V Congreso del Grupo Especializado en Física Atómica y Molecular de la Real Sociedad Española de Física*, Gandía (València), June 17-20, 1992.
14. Travel expenses grant, *6th. International Conference of Theoretical Aspects of Heterogeneous Catalysis*, Tarragona, June 2-7, 1996.
15. Programme committee member, *6th. International Conference of Theoretical Aspects of Heterogeneous Catalysis*, Tarragona, June 2-7, 1996.
16. Membership grant, *The Molecular Modelling and Graphics Network*, University of York, 1996- 1998, 2 years.
17. Programme committee member, *Conference on Human Factors in Computing Systems*, Pittsburgh (Pennsylvania), 1999.
18. Programme committee member, *Genetic and Evolutionary Computation Conference*, Orlando (FL), 1999.
19. Editor of the journal *Molecules*, MDPI, Basel (Switzerland), 1999-present.
20. Travel expenses grant, *Universal Applications of Molecular Modelling: From Chemistry to Biology*, Marseille (France), June 7-10, 1999.

21. *Journal Ambassador*, *Journal of Chemical Education*, 1999-present.
22. Programme committee member, *Conference on Human Factors in Computing Systems*, The Hague (Netherlands), 2000.
23. Travel expenses grant, *10th International Congress of Quantum Chemistry*, Menton (France), 2000.
24. Programme committee member, *4th World Multiconference on Circuits, Systems, Communications and Computers*, Athens (Greece), 2000.
25. Programme committee member, *World Multiconference on Systemics, Cybernetics and Informatics - International Conference on Information Systems Analysis and Synthesis*, Orlando (FL), 2000-present.
26. Programme committee member, *ACM Conference on Universal Usability*, Washington, 2000.
27. International scientific committee member, *WSES/MIUE/HNA International Conference: Mathematics and Computers in Biology and Chemistry*, Kingston (Jamaica), 2000.
28. Programme committee member, *Advanced Research Workshop on Semiconductor Nanostructures*, Queenstown (New Zealand), 2001.
29. Organizing and scientific committees member, *Neural Networks and Applications*, Puerto de la Cruz (Tenerife, Spain), 2001.
30. Organizing and scientific committees member, *Fuzzy Sets and Fuzzy Systems*, Puerto de la Cruz (Tenerife, Spain), 2001.

31. Organizing and scientific committees member, *Evolutionary Computations*, Puerto de la Cruz (Tenerife, Spain), 2001.
32. Programme committee member, *Computer-Human Interaction Conference*, 2001-present
33. Session co-chair, *IEEE International Conference on Industrial Electronics, Control and Instrumentation*, Nagoya (Japan), 2000.
34. Technical session chair, *International Conference on Mathematics and Engineering Techniques in Medicine and Biological Sciences*, Las Vegas (Nevada), 2001.
35. Travel expenses grant, *Congres des Chimistes Théoriciens d'Expression Latine*, Toulouse (France), 2001.
36. Programme committee member, *Conference on Human Factors in Computing Systems*, Minneapolis (Minnesota), 2002.
37. Scientific Advisory Board, *Electronic Molecular Modelling and Graphics Conference*, University of York, 2002.
38. Programme committee member, *International Conference on Information Technology: Coding and Computing*, Las Vegas (Nevada), 2003.
39. Programme committee member, *Conferencia Iberoamericana en Sistemas, Cibernética e Informática*, Orlando (FL), 2003-present.
40. Programme committee member, *First International Meeting on Applied Physics*, Badajoz (Spain), 2003.

41. Programme committee member, *International Conference in Central Europe on Computer Graphics, Visualization and Computer Vision*, Prague (Czech Republic), 2004-present.
42. Editor of the journal *MATCH Communications in Mathematical and in Computer Chemistry*, Faculty of Science, Kragujevac (Serbia and Montenegro), 2004-present.
43. Programme committee member, *International Conference on Education and Information Systems: Technologies and Applications*, Orlando (FL), 2004-present.
44. Programme committee member, *Second International Conference on Computing, Communications and Control Technologies*, Austin (Texas), 2004-present.
45. Programme committee member, *Fifth International Conference on Knowledge Based Computer Systems*, Hyderabad (India), 2004-present.
46. Magister en Gestión Educativa, Consejo Iberoamericano en Honor a la Calidad Educativa, Lima, 2004.
47. Subscription grant, *Cellular and Molecular Biology*, 2004-05, 1 year.
48. Programme committee member, *IPSI-2005 Hawaii*, Big Island (Hawaii), 2005.
49. Researcher in Charge for Temporary Stay, Invited Researcher: Yovani Marrero, Institut Universitari de Ciència Molecular, Universitat de València, 2005-2006, 6 months.
50. National Award of the Academy of Science of Cuba Minister Distiction, Collaborator, *Main author: Yovani Marrero, Title: De la estructura molecular a la actividad biológica: Aplicaciones y potencialidades de novedosos métodos de diseño computacional en estudios QSAR, QSPR, QSPkR, QSTR, proteómica y bioinformática, Trans: From molecular structure to biological activity: Applications and potentialities of novel methods of computational design in QSAR, QSPR, QSPkR, QSTR studies, proteomics and bioinformatics*, 2006.

51. Head of the Research Line Molecular Modelling of the Research Unit Theoretical Chemistry of the Institut Universitari de Ciència Molecular of the Universitat de València, 2006-present.
52. Head of the Research Group Molecular Modelling and Computer-Aided Drug Design, Red Valenciana de Genómica y Proteómica, 2006-present.
53. Head of the Research Group Molecular Modelling and Computer-Aided Drug Design, Red de Cooperación para la Gestión del Conocimiento en el Sector Biomédico, 2006-present.
54. Head of the Research Group Molecular Modelling and Computer-Aided Drug Design, Red de Investigación de Centros de Enfermedades Tropicales, 2006-present.
55. Head of the Research Group Molecular Modelling and Computer-Aided Drug Design, Red de Investigación en Salud y Género, 2006-present.
56. Programme committee member, *SIGAI National Workshop on Artificial Intelligence*, Mumbai (India), 2006.
57. Programme committee member, *International Conference on Composites/Nano Engineering*, Boulder (Colorado), 2006-present.
58. Programme committee member, *International Conference on Information Systems Analysis and Synthesis*, Orlando (FL), 2006-present.
59. Programme committee member, *International Conference on Intelligent System Design and Applications*, Jinan (Shandong, China), 2006-present.
60. Editor of the *Research Journal of BioTechnology*, Research Journal Biotechnology, Indore (M. P., India), 2006-present.

61. Editor of the journal *The IPSI Bgd Transactions on Internet Research*, IPSI Bgd Internet Research Society, New York, 2006-present.
62. Membership Grant, American Chemical Society, Washington (DC), 2006 (3 months) and 2007.
63. Head of the Research Group Molecular Modelling and Computer-Aided Drug Design, Fundación para el Desarrollo de la Investigación en Genómica y Proteómica (Genoma España), Madrid, 2006- present.
64. Head of the Research Group Molecular Modelling and Computer-Aided Drug Design, Instituto Nacional de Bioinformática, Madrid, 2006-present.
65. Head of the Research Group Molecular Modelling and Computer-Aided Drug Design, Instituto Nacional de Proteómica (ProteoRed), Madrid, 2006-present.
66. Programme committee member, *International Conference on Intelligent System Design and Applications*, Rio de Janeiro (Rio de Janeiro, Brazil), 2006-present.
67. Bioorganic & Medicinal Chemistry Most Cited Paper 2003–2006 Award, Y. Marrero Ponce, H. González Díaz, V. Romero Zaldivar, F. Torrens and E. A. Castro, 3D-Chiral quadratic indices of the *molecular pseudograph's atom adjacency matrix* and their application to central chirality codification: Classification of ACE inhibitors and prediction of  $\sigma$ -receptor antagonist activities, *Bioorg. Med. Chem.*, **12**, 5331-5342 (2004), 2003- 2006.
68. Researcher in Charge for Temporary Stay, Invited Researcher: Yovani Marrero, Institut Universitari de Ciència Molecular, Universitat de València, January 1-June 30, 2007.
69. Researcher in Charge for Temporary Stay, Invited Researcher: Yovani Marrero, Institut Universitari de Ciència Molecular, Universitat de València, September 1-December 31, 2007.
70. Journal of Molecular Graphics and Modelling Most Cited Paper Award, J. A. Castillo-Garit, Y. Marrero-Ponce, F. Torrens and R. Rotondo, Atom-based stochastic and non-stochastic 3D-chiral bilinear indices and their applications to central chirality codification, *J. Mol. Graphics Model.*, **26**, 32- 47 (2007).

71. Editor of the journal *Research & Reviews in BioSciences*, Trade Science, Nr. Saurashtra University, Rajkot (Gujarat, India), 2007-present.
72. Editor of the journal *Asian Journal of Biochemistry*, Asian Network for Scientific Information, Faisalabad (Pakistan) 2007-present.
73. Editor of the journal *Asian Journal of Scientific Research*, Asian Network for Scientific Information, Faisalabad (Pakistan) 2007-present.
74. Editor of the journal *Biotechnology*, Asian Network for Scientific Information, Faisalabad (Pakistan) 2007-present.
75. Editor of the journal *International Journal of Biological Chemistry*, Asian Network for Scientific Information, Faisalabad (Pakistan) 2007-present.
76. Programme committee member, *International Symposium on Electron, Ion and Photon Beams and Nanolithography*, Denver (Colorado), 2007-present.
77. Programme committee member, *International Conference on Knowledge Generation, Communication and Management*, Orlando (Florida), 2007-present.
78. Head of the Research Group Molecular Modelling and Computer-Aided Drug Design, M<sup>4</sup>nano Modelling for Nanotechnology Initiative, Phantoms Foundation–Universidad Autónoma de Madrid–Parque Científico de Madrid, Madrid (Spain), 2007-present.
79. Head of the Research Group Molecular Modelling and Computer-Aided Drug Design, Red de Unidades de Divulgación de Cultura Científica (MEC FECYT), Madrid, 2007-present.
80. Editor of the journal *Current Drug Discovery Technologies*, Bentham, Bussum (The Netherlands), 2007-present.

81. Head of the Research Group Molecular Modelling and Computer-Aided Drug Design, Red para la Aplicación de Nanotecnologías en Materiales y Productos para la Construcción y el Hábitat, València, 2007-present.
82. Editor of the Journal of WSCG, University of West Bohemia, Plzeň (Czech Republic), 2007-present.
83. Editor of the *African Journal of Biochemistry Research*, University of KwaZulu-Natal (Westville), Durban (Republic of South Africa), 2007-present.
84. Editor-in-Chief of *Meeting in Science, Technology, Education and Gender*, Universitat de València, València, 2007-present.
85. Head of the Research Group Molecular Modelling, Computer-Aided Drug Design and Development, Red Temática Nacional sobre Estructura y Función de Proteínas, Ministerio de Educación y Ciencia, Madrid (Spain), 2008-present.
86. Head of the Research Group Molecular Modelling, Computer-Aided Drug Design and Development, Red de Ingeniería de Materiales Biopoliméricos, Veracruz (Mexico), 2008-present.
87. Researcher in Charge for Temporary Stay, Invited Researcher: Juan Alberto Castillo, Institut Universitari de Ciència Molecular, Universitat de València, June 5-December 4, 2008.
88. Researcher in Charge for Temporary Stay, Invited Researcher: Gerardo Casañola, Universitat de València, September 1-November 30, 2008.
89. Editor of the journal *Molecular Diversity*, Springer, Berlin, 2008-present.
90. Editor of the *African Journal of Pure and Applied Chemistry*, Academic, 2008-present.

91. Editor of the *African Journal of Pharmacy and Pharmacology*, Academic, 2008-present.
92. Head of the Research Group Molecular Modelling, Computer-Aided Drug Design and Development, Red de Biosensores, MEC, 2008-present.
93. Member of EFSA Database of External Scientific Experts, European Food Safety Authority, Parma (Italy), 2008-present.
94. Editor of the *International Journal of Liquid State Sciences*, Darya Ganj (New Delhi, India), 2008-present.
95. Researcher in Charge for Temporary Stay, Invited Researcher: Yovani Marrero, Institut Universitari de Ciència Molecular, Universitat de València, 2009-2010, 6 months.
96. Merck-Serono congress grant: *3<sup>rd</sup> Instituto Valenciano de Infertilidad International Congress*, Madrid (Spain), 2009.
97. Permission request requirements grant, The American Association for the Advancement of Science, Boston (MA), 2009.
98. Editor of the *International Journal on Analytical Proteomics*, Academic, 2009-present.
99. Congress grant, *III Congreso Latinoamericano de Seguridad, Salud Ocupacional y Ambiente*, Guayaquil (Ecuador), July 22-24, 2009.
100. Head of the Research Group Molecular Modelling, Computer-Aided Drug Design and Development, Rede Latinoamericana de Meio Ambiente, Sociedades Nacionais de Meio Ambiente, 2009-present.

101. Editor of the journal *Research in Pharmaceutical Biotechnology*, Academic Journals, Victoria Island (Lagos), 2009-present.
102. Editor of the journal *IETE Technical Review*, The Institution of Electronics and Telecommunication Engineers, New Delhi (India), 2009-present.
103. Head of the Research Group Molecular Modelling, Computer-Aided Drug Design and Development, Red sobre Iniciación a la Docencia, Universidad de Buenos Aires, Buenos Aires (Argentina), 2009-present.
104. Editor of the journal *Der Pharma Chemica*, IndiaNational Defense Medical Center, Taipei (Taiwan), 2009-present.
105. Member of the Grup de Suport a la Docència en Valencià, *Trans.* Member of the Group of Support of Teaching in Valencian Language, Universitat de València, València, 2009-present.
106. Editor of the *Journal of Nanoscience and Nanotechnology*, American Scientific, Stevenson Ranch (CA), 2009-present.
107. Expert Evaluator of Agencia Nacional de Evaluación y Prospectiva. Ministerio de Ciencia e Innovación, Madrid, 2009-present.
108. Programme committee member, *International Conference on Information Technology Based Higher Education and Training*, Cappadocia (Turkey), 2010-present.
109. Editor of the *Journal of Electromagnetic Analysis and Applications*, Scientific Research, Wuhan (Hubei, China), 2010-present.
110. Programme committee member, *Workshop on Computer Graphics, Computer Vision and Mathematics*, Brno (Czech Republic), 2010-present.

111. Programme committee member, *IEEE Symposium on Industrial Electronics & Applications*, Penang (Malaysia), 2010-present.
112. Editor of the *Journal of Integrated –OMICS*, Universidade de Vigo, Ourense (Spain), 2010- present.
113. Programme committee member, *International Conference on Scientific & Social Science Research*, Kuala Lumpur (Malaysia), 2010-present.
114. Programme committee member, *International Conference on Computer Applications & Industrial Electronics*, Kuala Lumpur (Malaysia), 2010-present.
115. Programme committee member, *Summer Computer Simulation Conference*, Ottawa (Canada), 2010-present.
116. Programme committee member, *IEEE Conference on Open Systems*, Kuala Lumpur (Malaysia), 2010-present.
117. Programme committee member, *IEEE Symposium on Computers and Informatics*, Kuala Lumpur (Malaysia), 2011-present.
118. Head of the Research Group Molecular Modelling, Computer-Aided Drug Design and Development, Project BIOCHEM, Plataforma Tecnológica de Química Sostenible (SUSCHE-Spain), Madrid (Spain), 2010-present.
119. Programme committee member, *International Symposium on Humanities, Science and Engineering Reasearch*, Kuala Lumpur (Malaysia), 2010-present.
120. Programme committee member, *International Conference on Electronic Devices, Systems & Applications*, Kuala Lumpur (Malaysia), 2010-present.

121. Editor of the journal *Nereis*, Universidad Católica de Valencia *San Vicente Mártir*, València, 2010-present.
122. Membership grant, Society of Plastics Engineers, Newtown (Connecticut), 2010-2011 (1 year).
123. Programme committee member, *International Conference on Business Engineering and Industrial Applications*, Kuala Lumpur (Malaysia), 2010-present.
124. Editor of the *Journal of Life Sciences*, David Publishing, Libertyville (IL), 2011-present.
125. Editor of the *International Journal of Biochemistry Research & Review*, SCIENCEDOMAIN, London (UK), 2011-present.
126. Editor of the *International Journal of Chemoinformatics and Chemical Engineering*, IGI-Global, 2011-present.
127. Member of Fundación General CSIC. Consejo Superior de Investigaciones Científicas, Madrid, 2011-present.
128. Programme committee member, *IEEE Symposium on Wireless Technology Application*, Langkawi Island (Malaysia), 2011-present.
129. Programme committee member, *IEEE International Conference on Signal & Image Processing Applications*, Kuala Lumpur (Malaysia), 2011-present.
130. Programme committee member, *IEEE International RF and Microwave Conference*, Seremban (Malaysia), 2011-present.

131. Programme committee member, *IEEE Colloquium on Humanities, Science & Engineering Research*, Penang (Malaysia), 2011-present.
132. Programme committee member, *IEEE SCORed Conference*, Cyberjaya/Putrajaya (Malaysia), 2011-present.
133. Programme committee member, *International Workshop on Computer Vision and Computer Graphics*, Saint Gilles (Reunion Island), 2011-present.
134. Programme committee member, *IEEE Applied Power Electronics Colloquium*, Kuala Lumpur (Malaysia), 2011-present.
135. Editor of the *Journal of International Business Management*, JAVAR, 2011-present.
136. Editor of the journal *Current Research in Applied Sciences Engineering and Technology*, JAVAR, 2011-present.
137. Editor of the *Journal of Agricultural Science Advances*, JAVAR, 2011-present.
138. Editor of the *Journal of Animal & Veterinary Advance Research*, JAVAR, 2011-present.
139. Expert Evaluator of the National Center of Science and Technology Evaluation, Ministry of Education and Science, Astana (Kazakhstan), 2011-present.
140. Certificate of Appreciation, American Chemical Society Publications, Washington (DC), 2011.

141. Programme committee member, *International Conference on Interactive Mobile and Computer Aided Learning*, Amman (Jordan), 2012-present.
142. Programme committee member, *IEEE Asia-Pacific Conference on Applied Electromagnetics*, Melaka (Malaysia), 2012-present.
143. Editor of the journal *Consumer Electronics Times*, Admiralty, Hong Kong (China), 2012-present.
144. Scientific Expert Evaluator of the European Project RBUCE-UP, UniverSud Paris, Paris (France), 2012-present.
145. Programme committee member, *International Conference on Advances in Circuits, Electronics and Micro-electronics*, Rome (Italy), 2012-present.
146. Programme committee member, *IEEE International Conference on Power and Energy*, Malaysia (Malaysia), 2012-present.
147. Programme committee member, *IEEE Conference on Control, Systems & Industrial Informatics*, Bandung (Indonesia), 2012-present.
148. Programme committee member, *IEEE Conference on Electronics Design, Systems and Applications*, Kuala Lumpur (Malaysia), 2012-present.
149. Editor of the journal *Advances in Nano Research*, Techno-Press, Daejeon (Korea), 2012-present.
150. Editor of the journal *International Journal of Research in Biosciences*, India, 2012-present.

151. Editor of the journal *Universal Journal of Microbiology and Biochemistry*, Sapele (Delta State, Nigeria), 2012-present.
152. Programme committee member, *IEEE Symposium on Computer Applications & Industrial Electronics*, Kota Kinabalu (Malaysia), 2012-present.
153. Programme committee member, *IEEE Symposium on e-Learning, e-Management and e-Services*, Kuala Lumpur (Malaysia), 2012-present.
154. Programme committee member, *International Congress on Engineering Education*, Penang (Malaysia), 2012-present.
155. Editor of the *Journal of Scientific Research and Reports*, SCIENCEDOMAIN, London (UK), 2012-present.
156. Programme committee member, *IEEE Student Conference on Research and Development*, Penang (Malaysia), 2012-present.
157. Expert Evaluator of the Medical Research Council Research Grants Management System, Cape Town (South Africa), 2012-present.
158. Programme committee member, *IEEE International Conference on Control System, Computing and Engineering*, Penang (Malaysia), 2012-present.
159. Editor of the *Journal of Materials Science and Engineering (A & B)*, David, Libertyville (IL), 2012-present.
160. Expert Evaluator of European Quality Assurance Certificados I+D+i, Madrid (Spain), 2012-present.

161. Editor of the *International Journal of Sensor and Related Networks*, 2012-present.
162. Invitation: I Jornada sobre Salud: Un Enfoque Integral, *Trans. I Day on Health: An Integral Approach*, Universidad Politécnica de Valencia, València, 2012.
163. Membership grant, The Minerals, Metals and Materials Society, Warrendale (PA), 2013 (3 months).
164. Expert Evaluator of the Netherlands Organisation for Scientific Research, Amsterdam (The Netherlands), 2013-present.
165. Prize of the Academy of Sciences of Cuba in 2012, Academy of Sciences of Cuba, Havana (Cuba), 2013.
166. Programme committee member, *IEEE Conference on Wireless Sensors*, Kuching (Malaysia), 2013-present.
167. Programme committee member, *Colloquium on Administrative Science & Technology*, Kuching (Malaysia), 2013-present.
168. Editor of the *Universal Journal of Chemistry*, Horizon Research, San Jose (CA), 2013-present.
169. Advisory Board Member of *Science and Education Development Institute*, Akure (Ondo, Nigeria), 2013-present.
170. Programme committee member, *International Conference on Biomedical Engineering and Biotechnology*, Wuhan (China), 2013-present.

171. Programme committee member, *International Civil and Infrastructure Engineering Conference*, Kuching (Malaysia), 2013-present.
172. Programme committee member, *IEEE Control and System Graduate Research Colloquium*, Shah Alam (Malaysia), 2013-present.
173. Programme committee member, *International Conference on System Engineering and Technology*, Shah Alam (Malaysia), 2013-present.
174. Editor of the *Science Road Journal*, New Century, Kiev (Ukraine), 2013-present.
175. Programme committee member, *IEEE International Conference on Clean Energy and Technology*, Langkawi Island (Malaysia), 2013-present.
176. Editor of the journal *Advances in Research*, SCIENCEDOMAIN, London (UK), 2013-present.
177. Editor of *Journal of Nanomaterials and Molecular Nanotechnology*, SciTechnol, Henderson (NV), 2013-present.
178. Programme committee member, *International Conference on Communication and Computer Engineering*, Melaka (Malaysia), 2013-present.
179. Editor of *Austin Journal of Nanomedicine & Nanotechnology*, Austin, Melbourne (Australia), 2013-present.
180. Programme committee member, *IEEE Innovative Smart Grid Technologies Conference Asia*, Kuala Lumpur (Malaysia), 2013-present.

181. Editor of *German Journal of Advanced Mathematical Sciences*, German Science and Technology Press, Saarbrücken (Germany), 2013-present.
182. Programme committee member, *2<sup>nd</sup> International Conference on Advanced Micro and Nanocomposite for Engineering*, Penang (Malaysia), 2013-present.
183. Programme committee member, *International Postgraduate Colloquium on Science and Technology*, Penang (Malaysia), 2013-present.
184. Programme committee member, *International Colloquium on Sports Science, Exercise, Engineering and Technology*, Penang (Malaysia), 2013-present.
185. Programme committee member, *International Conference Science and Education Development Institute*, Akure (Ondo, Nigeria), 2013-present.
186. Programme committee member, *International Symposium on Technology Management and Emerging Technologies*, Bandung (Indonesia), 2013-present.
187. Programme committee member, *IEEE Colloquium on Signal Processing and its Applications*, Kuala Lumpur (Malaysia), 2014-present.
188. Programme committee member, *International Conference on Electronic Design*, Penang (Malaysia), 2014-present.
189. Programme committee member, *International Conference of Francophone Engineers and Technicians*, Beyrouth (Liban), 2014-present.
190. Programme committee member, *Conference, Competition and Exhibition*, Beirut (Lebanon), 2014-present.

191. Editor of *Journal of Nanotechnology: Nanomedicine & Nanobiotechnology*, Herald Scholarly Open Access, Washington (DC), 2014-present.
192. Programme committee member, *IEEE Conference on Biomedical Engineering and Sciences*, Miri (Sarawak, Malaysia), 2014-present.
193. Programme committee member, *Renewable Energy and Green Technology International Conference*, Bandung (Indonesia), 2014-present.
194. Programme committee member, *International Conference on Computer, Communication, and Control Technology*, Langkawi Island (Kedah, Malaysia), 2014-present.
195. Programme committee member, *International Symposium on Research of Arts, Design and Humanities*, Kota Kinabalu (Malaysia), 2014-present.
196. Editor of the journal *Evolving Trends in Engineering & Technology*, India, 2014-present.
197. Programme committee member, *Advancement in Information Technology International Conference*, Bandung (Indonesia), 2014-present.
198. Editor of the *Journal of Biochemistry International*, International Knowledge Press, Manchester (UK), 2014-present.
199. Editor of the *Journal of Basic and Applied Research International*, International Knowledge Press, Manchester (UK), 2014-present.
200. Editor of the *Journal of Biochemistry and Molecular Biology Research*, Hong Kong, 2014-present.

201. Editor of the journal *Advances in Water Science and Technology*, *Advancements in Science*, 2014-present.

202. Programme committee member, *Knowledge Management International Conference*, Langkawi Island (Malaysia), 2014-present.

203. Diploma al Resultado Científico, *Trans. Diploma to Science Result*, J. A. Castillo, M. C. Vega, M. Rolón, F. Torrens, C. Abad, J. A. Escario and A. Gómez Barrio, Descubrimiento (identificación/selección de nuevos compuestos con acción antitripanosoma mediante la combinación de estudios *in silico* y posterior evaluación farmacológica *in vitro* y/o *in vivo*, *Trans. Discovery (identification/selection of new compounds with anti-trypanosomal action through the combination of in silico studies and later in vitro and/or in vivo pharmacological evaluation*, Ministerio de Ciencia, Tecnología y Medio Ambiente en Villa Clara–Consejo de la Administración Provincial, Cuba, 2004.

204. Programme committee member, *International Conference on Business, Management, Tourism and Hospitality*, Melaka (Malaysia), 2015-present.

205. Programme committee member, *IEEE Conference on Energy Conversion*, Johor Bahru (Malaysia), 2015-present.

206. Programme committee member, *International Conference on Education*, Bali (Indonesia), 2015-present.

207. Programme committee member, *Advanced Research in Material Sciences, Manufacturing, Mechanical and Mechatronic Engineering Technology International Conference*, Bali (Indonesia), 2015-present.

208. Editor of the journal *New Frontiers in Chemistry*, West University of Timisoara, Timisoara (Romania), 2015-present.

209. Programme committee member, *International Conference on BioSignal Analysis, Processing and System*, Kuala Lumpur (Malaysia), 2015-present.

210. Editor of the journal *Analytical Chemistry Insights*, *Libertas Academica*, Auckland (New Zealand), 2015-present.

211. Editor of the journal *Evolutionary Bioinformatics*, Libertas Academica, Auckland (New Zealand), 2015-present.
212. Programme committee member, *IEEE International Circuits and Systems Symposium*, Langkawi (Malaysia), 2015-present.
213. Programme committee member, *International Conference on Environmental Science and Energy Engineering*, Phuket (Thailand), 2015-present.
214. Programme committee member, *Game Physics and Mechanics International Conference*, Langkawi (Malaysia), 2015-present.
215. Editor of *SM Journal of Nanotechnology and Nanomedicine*, SM Group, 2015-present.
216. Expert Evaluator of the National Agency for Technological Development, Astana (Kazakhstan), 2015-present.
217. Programme committee member, *International Symposium on Health and Medical Sciences*, Krabi (Thailand), 2015-present.
218. Programme committee member, *International Conference on Materials Chemistry and Environmental Protection*, Sanya (China), 2015-present.
219. Expert Evaluator of the Czech Science Foundation, Praga (Czech Republic), 2015-present.
220. Programme committee member, *Advancement on Information Technology International Conference*, Krabi (Thailand), 2015-present.

221. Programme committee member, *Applied Electromagnetic International Conference*, Krabi (Thailand), 2015-present.
222. Programme committee member, *International Conference on Science and Social Research–Sustainable Engineering and Construction*, Shah Alam (Selangor, Malaysia), 2015-present.
223. Programme committee member, *International Conference on Science and Social Research–Social and Behavioral Science*, Shah Alam (Selangor, Malaysia), 2015-present.
224. Editor of the journal *Advances in Modern Oncology Research*, PiscoMed, Singapore, 2015-present.
225. Programme committee member, *International Conference on Engineering Management and Industrial Technology*, Medan (Indonesia), 2015-present.
226. Programme committee member, *Recent Advancement in Informatics, Electrical and Electronics Engineering International Conference*, Medan (Indonesia), 2015-present.
227. Programme committee member, *International Conference on Information in Business and Technology Management*, Melaka (Malaysia), 2015-present.
228. Programme committee member, *International Symposium of Information and Internet Technology*, Melaka (Malaysia), 2015-present.
229. Editor-in-Chief of the journal *Advanced Science and Technology*, PiscoMed, 2015-present.
230. Editor of the journal *Molecules & Medicinal Chemistry*, Smartscitech, 2015-present.

231. Programme committee member, *International Conference on Information Systems and Applications*, Bahrain (Bahrain), 2015-present.
232. Editor of the *Global Journal of Cancer Therapy*, Peertechz, Hyderabad (India), 2015-present.
233. Editor of the *Global Journal of Ecology*, Peertechz, Hyderabad (India), 2015-present.
234. Programme committee member, *International Conference on Business, Economics, Management, Social Sciences, Art and Humanities*, Yekaterinburg (Russia), 2015-present.
235. Editor of the *International Journal of Nanomaterials, Nanotechnology and Nanomedicine*, Peertechz, Hyderabad (India), 2015-present.
236. Programme committee member, *International Conference on Residuals Science and Environmental Engineering*, Phuket Island (Thailand), 2015-present.
237. Programme committee member, *IEEE International Symposium on Signal Processing and Information Technology*, Abu Dhabi (United Arab Emirates), 2015-present.
238. Editor of the *Open Journal of Engineering and Technology*, 2015-present.
239. Editor of the *Journal of Translational Proteomics Research*, Cosmos, 2015-present.
240. Programme committee member, *IEEE International Conference on Teaching and Learning in Education*, Kuala Lumpur (Malaysia), 2015-present.

241. Expert Evaluator of Institut Valencià de Competitivitat Empresarial, Generalitat Valenciana, València, 2015-present.
242. Editor of the *International Journal of Academic Studies*, 2015-present.
243. Editor of the *Journal of Nanoscience, Nanomedicine & Nanobiology*, Henty Publishing Group, Rayal Oak (Auckland, New Zealand), 2015-present.
244. Editor of the journal *International Journal of Molecular Sciences*, MDPI, Basel (Switzerland), 2015-present.
245. Editor of the journal *Polymers*, MDPI, Basel (Switzerland), 2015-present.
246. Member of Unit of Research in Theoretical Chemistry/Methods, *Chair*. José Sánchez, Universitat de València, 2016-present.
247. Programme committee member, *International Conference on Cancer Diagnostic and Medical Treatment Approaches*, Rome (Italy), 2016-present.
248. Programme committee member, *Advanced Research in Engineering and Information Technology International Conference*, Bandung (Indonesia), 2016-present.
249. Programme committee member, *International Conference on Concrete Engineering and Technology*, Selangor (Malaysia), 2016-present.
250. Programme committee member, *Advancement on Informatics, Business and Management International Conference*, Hradec Kralove (Czech Republic), 2016-present.

251. Programme committee member, *Advancement Research on Circuits and Systems International Conference*, Hradec Kralove (Czech Republic), 2016-present.
252. Editor of the *Gavin Journal of Oncology Research and Therapy*, Gavin, Lisle (IL), 2016-present.
253. Editor of the *Journal of Cellular & Molecular Oncology*, Henry, Auckland (New Zealand), 2016-present.
254. Programme committee member, *IEEE Industrial Electronics and Applications Conference*, Kota Kinabalu (Sabah, Malaysia), 2016-present.
255. Programme committee member, *Recent Research in Social Sciences International Conference*, Bandung (Indonesia), 2016-present.
256. Programme committee member, *International Conference on Material Technology and Environmental Materials*, Beijing (China), 2016-present.
257. Programme committee member, *Art and Design International Conference*, Shah Alam (Selangor, Malaysia), 2016-present.
258. Programme committee member, *Education in Science, Technology and Social Science World Conference*, Krabi (Thailand), 2016-present.
259. Editor of the *Journal of Advances in Physics*, Council for Innovative Research, Rajasansi (Amritsar, Punjab, India), 2016-present.
260. Editor of the *Journal of Oral Health and Craniofacial Science*, Heighten Science Publications, Irving (TX), 2016-present.

261. Editor of the *Jacobs Journal of Organic Chemistry*, Jacobs, Austin (TX), 2016-present.
262. Programme committee member, *International Conference on Sustainable Engineering & Technology*, Malacca (Malaysia), 2016-present.
263. Programme committee member, *Advanced Research in Electronic Engineering and Information Technology International Conference*, Bali (Indonesia), 2016-present.
264. Editor of the *Jacobs Journal of Inorganic Chemistry*, Jacobs, Austin (TX), 2016-present.
265. Editor of the Journal *Nanoscience, Nanomedicine & Nanobiology*, Henry, Auckland (New Zealand), 2016-present.
266. Editor of the *Osteology and Rheumatology – Open Journal*, Openventio, Fairfax (VA), 2016-present.
267. Editor of the *Journal of Applied and Theoretical Physics Research*, Verizona, London (UK), 2016-present.
268. Programme committee member, *The International Conference on Electrical, Electronic, Communication and Control Engineering*, Johor Bahru (Malaysia), 2016-present.
269. Programme committee member, *1<sup>st</sup> International Joint Conference on Computer, Electrical and Electronics Engineering*, Melbourne (Australia), 2017-present.
270. Programme committee member, *Advancement Research in Circuits and Systems International Conference*, Langkawi Island (Kedah, Malaysia), 2016-present.

271. Programme committee member, *Progress in Computer Sciences and Information Technology International Conference*, Langkawi Island (Kedah, Malaysia), 2016-present.
272. Editor of the *International Journal of Nanotechnology & Nanomedicine*, Opast, 2016-present.
273. Editor of the journal *Molecules*, Section Theoretical Chemistry, MDPI, Basel (Switzerland), 2016-present.
274. Programme committee member, *IEEE International Conference on Engineering Education*, Kuala Lumpur (Malaysia), 2016-present.
275. Editor of the journal *Med One*, Qingres, London (UK), 2016-present.
276. Editor of the *International Journal of Research in Pharmacy and Biosciences*, Sryahwa, Hyderabad (India), 2016-present.
277. Editor of the *Public Health-Open Journal*, Openventio, Fairfax (VA), 2016-present.
278. Programme committee member, *International Conference on Management Science and Management Innovation*, Nanjing (China), 2016-present.
279. Programme committee member, *Recent Advancement in Engineering and Sciences*, Langkawi (Kedah, Malaysia), 2016-present.
280. Editor of the journal *Current Computer-Aided Drug Design*, Bentham Science, Beijing (China), 2016-present.

281. Programme committee member, *International Conference on Information Science, Technology, Management, Humanities & Business*, Penang (Malaysia), 2016-present.
282. Programme committee member, *World International Conference on Islamic Sciences*, Kuala Lumpur (Malaysia), 2016-present.
283. Programme committee member, *International Conference on the Application of Science and Mathematics*, Bali (Indonesia), 2016-present.
284. Editor of the *International Journal of Research Studies in Biosciences*, Academicians' Research Center, Ongole (Andhra Pradesh, India), 2016-present.
285. Programme committee member, *IEEE-EMBS Conference on Biomedical Engineering and Sciences*, Kuala Lumpur (Malaysia), 2016-present.
286. Editor of the Journal *Theoretical Physics*, Isaac Scientific, Kowloon (Hong Kong, China), 2016-present.
287. Programme committee member, *Borneo International Conference on Digital Content*, Kota Kinabalu (Sabah, Malaysia), 2016-present.
288. Programme committee member, *International Business and Economic Conference*, Langkawi Island (Kedah, Malaysia), 2016-present.
289. Member of the Research Group on Theoretical Chemistry/Methods, *Chair*. José Sánchez-Marín, Universitat de València, 2016-present.
290. Programme committee member, *International Conference on Advances in Computing, Communications and Informatics*, Manipal (Karnataka, India), 2016-present.

291. Editor of the *International Journal of Vaccines and Technologies*, Clyto Access, San Diego (CA), 2016-present.
292. Editor of the journal *Symmetry*, MDPI, Basel (Switzerland), 2016-present.
293. Editor of the journal *Games*, MDPI, Basel (Switzerland), 2016-present.
294. Editor of the journal *PLOS ONE*, PLOS, San Francisco (CA), 2016-present.
295. Editor of the *Journal of Nanoparticles and Nanotechnology*, Helics Group, Whittier (CA), 2017-present.
296. Programme committee member, *Asia Simulation Conference*, Melaka (Malaysia), 2017-present.
297. Programme committee member, *International Symposium on Business, Management and Social Sciences*, Bandung (Indonesia), 2017-present.
298. Programme committee member, *Progress in Electronics Engineering, Computer Engineering and Information Technology*, Bandung (Indonesia), 2017-present.
299. Programme committee member, *Annual International Workshop on Materials Science and Engineering*, Guangzhou (Guangdong, China), 2017-present.
300. Programme committee member, *International Conference on Art, Business, Education and Social Sciences*, Langkawi Island (Kedah, Malaysia), 2017-present.

301. Editor of the *Central European Journal of Experimental Biology*, Scholars Research Library, Hyderabad (Telangana, India), 2017-present.
302. Editor of the journal *Global Drugs and Therapeutics*, Open Access Text, London (UK), 2017-present.
303. Editor of the journals *ePublication House*, The Global Bio Pharma Conference Group, New York (NY), 2017-present.
304. Programme committee member, *Advanced Research on Business, Management and Humanities*, Phuket (Thailand), 2017-present.
305. Programme committee member, *International Conference on Biomedical and Biological Engineering*, Guilin (China), 2017-present.
306. Programme committee member, *International Conference on Modern Education and Social Science*, Nanjing (China), 2017-present.
307. Programme committee member, *International Conference on Mechanics and Mechatronics*, Xiamen (China), 2017-present.
308. Programme committee member, *International Conference on Management Science and Engineering*, Guilin (Guangxi, China), 2017-present.
309. Programme committee member, *International Symposium on Emerging Topics in Circuits and Systems*, Karnataka (India), 2017-present.
310. Programme committee member, *Recent Development in Sciences, Engineering and Computer Sciences International Conference*, Bandung (Indonesia), 2017-present.

311. Editor of the journal *EMS Engineering Science Journal*, EMS Publishers, Washington (DC), 2017-present.
312. Programme committee member, *Asia Pacific Microwave Conference*, Kuala Lumpur (Malaysia), 2017-present.
313. Programme committee member, *IEEE Asia Pacific Conference on Postgraduate Research in Microelectronics and Electronics*, Kuala Lumpur (Malaysia), 2017-present.
314. Editor of the *International Journal of Research Studies in Science, Engineering and Technology*, Sryahwa, Hyderabad (India), 2017-present.
315. Editor of the *Open Access Journal of Physics*, Sryahwa, Hyderabad (India), 2017-present.
316. Editor of the *SciFed Journal of Separation Techniques*, Scientific Federation, Washington (DC), 2017-present.
317. Editor-In-Chief of the *Global Journal of Cancer Therapy*, Peertechz, Hyderabad (India), 2017-present.
318. Editor of the *SciFed Journal of Ophthalmology*, Scientific Federation, Washington (DC), 2017-present.
319. Editor of the *Global Journal of Medical and Clinical Case Reports*, Peertechz, Hyderabad (India), 2017-present.
320. Programme committee member, *Advanced Research in Electrical and Electronic Engineering Technology*, Jakarta (Indonesia), 2017-present.

321. Programme committee member, *International Conference on Microelectronics Devices and Technologies*, Barcelona (Spain), 2017-present.
322. Editor of the *Journal of Advances in Breast Cancer Research and Development*, Scient Open Access, Sarnia (Ontario, Canada), 2017-present.
323. Editor of the *International Journal of Materials Science and Applications*, Science Publishing Group, New York (NY), 2017-present.
324. Editor of the *EC Pharmacology and Toxicology*, E-Cronicon Open Access, London (UK), 2017-present.
325. Programme committee member, *International Conference and Exhibition on Cancer & Therapeutics*, Las Vegas (NV), 2017-present.
326. Editor of the *Research Journal of Nanoscience and Engineering*, Sryahwa, Hyderabad (India), 2017-present.
327. Editor of the *SciFed Journal of Astrophysics*, Scientific Federation, Washington (DC), 2017-present.
328. Editor of the journal *Archives of Applied Science Research*, Scholars Research Library, Hyderabad (Telangana, India), 2017-present.
329. Editor of the *Elyns Journal of Material Science and Techniques*, Elyns, Monmouth Junction (NJ), 2017-present.
330. Editor of the journal *Novel Techniques in Nutrition and Food Science*, Crimson, New York (NY), 2017-present.

331. Programme committee member, *International Conference on Innovative and Creative Information Technology*, Salatiga (Indonesia), 2017-present.
332. Programme committee member, *International Conference on Emerging Materials and Nanotechnology*, Vancouver (Canada), 2017-present.
333. Editor of *Journal of Genes and Proteins*, SciTechnol, Henderson (NV), 2017-present.
334. Editor of *Global Scientific Research Journal of Oncology*, Global Scientific Reserch Journals, Schaumburg (IL), 2017-present.
335. Programme committee member, *International Conference on Technology & Trust*, Greater Noida (U.P., India), 2017-present.
336. Programme committee member, *World Congress on Circuits and Systems Conference*, Kuala Lumpur (Malaysia), 2017-present.
337. Programme committee member, *Symposium on Islamic Sciences and Technology*, Kuala Lumpur (Malaysia), 2017-present.
338. Editor of *Journal of Bioavailability and Bioequivalence*, The Scientific Pages, Carson City (NV), 2017-present.
339. Editor of the journal *Infectious Diseases*, Alliedresearch, 2017-present.
340. Editor of the *Journal of Biomedical and Pharmaceutical Sciences*, OMICS International, Gachibowli (Hyderabad, India), 2017-present.

341. Programme committee member, *IEEE Conference on Applications, Information and Network Security*, Miri (Sarawak, Malaysia), 2017-present.
342. Editor of the *Journal of Blood Disorders and Treatment*, Pulsus, London (UK), 2017-present.
343. Programme committee member, *International Conference on Industrial, Enterprise, and System Engineering*, Bandung (Indonesia), 2017-present.
344. Editor of the *Gavin Journal of Drug Design, Delivery and Safety*, Gavin, Lisle (IL), 2017-present.
345. Editor of the *Journal of Molecular Cancer*, Pulsus, London (UK), 2017-present.
346. Programme committee member, *IEEE Conference on Big Data and Analytics*, Kuching (Malaysia), 2017-present.
347. Programme committee member, *International Conference on Philosophy, Theology and Oriental Studies*, Krabi (Thailand), 2017-present.
348. Programme committee member, *International Symposium on Social Sciences, Arts and Humanities*, Krabi (Thailand), 2017-present.
349. Editor of the *Journal of Clinical Genomics*, SciTechnol, Westlake (Los Angeles, CA), 2017-present.
350. Editor of the journal *Holistic Approaches in Oncotherapy*, Scientia Ricerca, Tustin (CA), 2017-present.

351. Programme committee member, *International Conference on Marketing and Retailing*, Phuket (Thailand), 2017-present.
352. Editor of the *European Journal of Applied Engineering and Scientific Research*, Scholars Research Library, Hyderabad (Telangana, India), 2017-present.
353. Programme committee member, *IEEE International Conference on Photonics*, Langkawi Island (Malaysia), 2017-present.
354. Programme committee member, *International Conference and Exhibition on Materials and Engineering*, San Diego (CA), 2017-present.
355. Organizer, International Conference on Multidisciplinary Sciences – Iberoamerican Workshop on Interdisciplinary Modelization and Simulation Methods, València, Spain, 2017-present.
356. Editor of the journal *Annals of Infections and Antibiotics*, OMICS International, Estados Unidos, 2017-present.
357. Editor of *Virology & Immunology Journal*, MedWin, Troy (MI), 2017-present.
358. Programme committee member, *Annual Biotechnology Congress*, Vancouver (Canada), 2017-present.
359. Editor of *Journal of Clinical Research and Pharmacy*, Allied Academies, London (UK), 2017-present.
360. Programme committee member, *International Colloquium on Biotechnology & Biomedical Engineering*, Dubai (United Arab Emirates), 2017-present.

361. Editor of *Journal of Advances in Nanomaterials*, Isaac Scientific Publishing, Kowloon (Hong Kong), 2017-present.
362. Editor of the *SF Journal of Pharmaceutical and Analytical Chemistry*, Science Forecast, Tipple (OH), 2017-present.
363. Editor of *Analytical Chemistry: An Indian Journal*, Trade Science, Raidurgam village (Serilingampally Mandal, Hyderabad, India), 2017-present.
364. Editor of the *Archives of Preventive Medicine*, Peertechz, Hyderabad (India), 2017-present.
365. Editor of *Vaccines & Vaccination Open Access*, MedWin, Troy (MI), 2018-present.
366. Editor of the *Journal of the International Association of Advanced Technology and Science*, International Association of Advanced Technology and Science, Firozpur Jhirka (Haryana, India), 2018-present.
367. Editor of the *American Research Journal of Infectious Diseases*, American Research Journals, Chicago (IL), 2018-present.
368. Editor of the *American Research Journal of Nanotechnology*, American Research Journals, Chicago (IL), 2018-present.
369. Programme committee member, *International Conference on Mobile Web and Intelligent Information Systems*, Barcelona (Spain), 2018-present.
370. Programme committee member, *International Workshop on Mobile Applications*, Barcelona (Spain), 2018-present.

371. Editor of the *Journal of Cancer Science and Treatment*, SciTech Central, Walnut (CA), 2018- present.
372. Editor of the *Journal of Soil Science and Environmental Management*, Academic Journals, Ebène (Mauritius), 2018-present.
373. Programme committee member, *IEEE PES Asia-Pacific Power and Energy Engineering Conference*, Kota Kinabalu (Sabah, Malaysia), 2018-present.
374. Diploma por haber obtenido el Premio CITMA a la investigación a nivel provincial, *Trans.* Diploma by having obtained the CITMA Prize for research at county level, Y. Cañizares, J. A. Castillo, K. Mena, Y. Marrero, F. Torrens and Y. Perera, Identificación *in silico* de nuevos compuestos inhibidores de la enzima termolisina como alternativas terapéuticas, *Trans. In silico* identification of new compounds inhibitory thermolysin enzyme as therapeutic alternatives, Ministerio de Ciencia, Tecnología y Medio Ambiente en Villa Clara–Consejo de la Administración Provincial, Cuba, 2018.
375. Editor of *Journal of Clinical Pharmacology & Toxicology*, MedText, Dover (DE), 2018-present.
376. Editor of *Open Access Journal of Oncology*, Chembio, Troy (MI), 2018-present.
377. Editor of *International Journal of Nano Reseach & Applications*, Clinical Medical Engineering, Overland Park (KS), 2018-present.
378. Editor of *Journal of Nutritional Dietetics & Probiotics*, Chembio, Troy (MI), 2018-present.
379. Editor of *Computer Engineering Open Access Open Journal*, S Open Access Open Journlas, Menomonee Falls (WI), 2018-present.
380. Editor of *Annals of Clinical Pharmacology & Toxicology*, MedText, Dover (DE), 2018-present.

381. Editor of the *Journal of Physics Research and Applications*, Heighen Science Publications, Irving (TX), 2018-present.
382. Editor of the Journal *CPQ Nutrition*, Cient Periodique, Toronto (ON), 2018-present.
383. Editor of the Journal *Clinics of Oncology*, United Prime Publications, Las Vegas (NV), 2018-present.
384. Editor of *Horizon Journals*, Horizon Journals, 2018-present.
385. Editor of the *Horizon Journal of Agriculture and Food Science*, Horizon Journals, 2018-present.
386. Editor of the *Horizon Journal of Food Science and Technology*, Horizon Journals, 2018-present.
387. Editor of the *Horizon Journal of Medicinal Plant Research*, Horizon Journals, 2018-present.
388. Editor of the *Horizon Journal of Pharmacy and Pharmacology*, Horizon Journals, 2018-present.
389. Editor of the *Horizon Journal of Research in Environmental Studies*, Horizon Journals, 2018-present.
390. Editor of the *Open Access Journal of Physics*, Arjyopa, Assam (India), 2018-present.

391. Editor of the Journal *Clinics of Oncology Prostate Cancer Division*, United Prime Publications, Las Vegas (NV), 2018-present.
392. *Editorial Ambassador*, Bentham Ambassador, Bentham, 2018-present.
393. Editor of *Journal of Ophthalmology and Advanced Treatment*, Vagus IPS, London (UK), 2018-present.
394. Editor of *Journal of Applied Biopharmaceutics and Pharmacokinetics*, Scientific Array, Karachi (Pakistan), 2018-present.
395. Programme committee member, *International Conference on Innovation and Intelligence for Informatics, Computing, and Technologies*, Bahrain (Bahrain), 2018-present.
396. Editor of the *Journal of Cancer & Clinical Research*, iGenesis SciMed Pro, Redmond (WA), 2018-present.
397. Programme committee member, *Annual Conference on Material Science and Engineering*, Dubai (United Arab Emirates), 2018-present.
398. Programme committee member, *International Symposium on Cloud Computing and Cyber-Security*, London (UK), 2018-present.
399. Editor of the journal *COJ Electronics & Communications*, Crimson Publishers, New York (NY), 2018-present.
400. Editor of the journal *Ophthalmology and Vision Science*, Scientia Ricerca, Tustin (CA), 2018-present.

401. Programme committee member, *IEEE Conference on Applications, Information and Network Security*, Langkawi (Malaysia), 2018-present.
402. Editor of the journal *Materials Science: Advanced Composite Materials*, Whioce Publishing, Singapore (Singapore), 2018-present.
403. Editor of *Petroleum & Petrochemical Engineering Journal*, MedWin, Troy (MI), 2018-present.
404. Editor of the *Journal of Nanotechnology Open Access*, Vivid Open Access, Dover (DE), 2018-present.
405. Programme committee member, *World Congress on Cell Science and Molecular Biology*, Kuala Lumpur (Malaysia), 2018-present.
406. Editor of the *Academic Journal of Botanical Sciences*, International Association of Scientists and Researchers, Delhi (India), 2018-present.
407. Editor of the *Madridge Journal of Ophthalmology*, Madridge, Pleasanton (CA), 2018-present.
408. Editor of *Enliven: Journal Genetics, Molecular and Cellular Biology*, Enliven, Dover (DE), 2018-present.
409. Editor of the Journal *Region – Technologies (OA Journal)*, EnPress, Tustin (CA), 2018-present.
410. Editor of the *Global Journal of Nutrition & Food Science*, Iris, San Francisco (CA), 2018-present.

411. Editor of the *Chronicle Journal of Engineering Science*, Chronicle, Hyderabad (India), 2018-present.
412. Programme committee member, *IEEE International Conference on Advanced Computational and Communication Paradigms*, Sikkim (India), 2018-present.
413. Editor of *Journal of Vaccine Research*, Scholarena, Warrensburg (MO), 2018-present.
414. Editor of the journal *Environmental Science and Technology*, Universe Scientific, Singapore (Singapore), 2018-present.
417. Editor of *Journal of Clinical and Laboratory Investigation Updates*, JPM, Gadap Town (Karachi, Pakistan), 2018-present.
418. Editor of *Journal of Petrochemical Sciences & Reaction Engineering*, Scient Open Access, Las Vegas (NV), 2018-present.
419. Programme committee member, *IEEE Conference on e-Learning, e-Management and e-Services*, Langkawi (Malaysia), 2018-present.
420. Editor of the journal *Petroleum and Chemical Industry International*, Opast, Overland Park (KS), 2018-present.

421. Editor of the Journal *Region – Environmental Science*, EnPress, Tustin (CA), 2018-present.
422. Editor of *Enliven: Clinical Case Reports*, Enliven, Dover (DE), 2018-present.
423. Editor of the Journal *Region – Environments*, EnPress, Tustin (CA), 2018-present.
424. Editor of the Journal *Region – Environmental Science and Technology*, EnPress, Tustin (CA), 2018-present.
425. Programme committee member, *Sustainability and Resilience Conference*, Bahrain (Bahrain), 2018-present.
426. Editor of the *International Journal of Recent Development in Sciences*, Lovely Professional University, Phagwara (Punjab, India), 2018-present.
427. Editor of the *Journal of Aquatic Sciences and Oceanography*, Scholarena, Warrensburg (MO), 2018-present.
428. Editor of the *International Journal of Nanoparticles and Nanotechnology*, Helics Group, Whittier (CA), 2018-present.
429. Editor of the *SCIREA* journals, Science Research Association, 2018-present.
430. Editor of the Journal *Region – Environmental Science*, Frontier Scientific, Singapore (Singapore), 2018-present.

431. Editor of the journal *Advances in Modern Oncology Research*, Bilingual, Singapore, 2018-present.
432. Programme committee member, *International Conference in Electrical, Electronic and Computer Engineering*, Penang (Malaysia), 2018-present.
432. Editor of the *Journal of Blood Transfusions and Diseases*, SciTech Central, Walnut (CA), 2018-present.
433. Editor of the *Journal of Infectious Diseases & Travel Medicine*, Medwin, Troy (MI), 2018-present.
434. Editor of the journal *International Research Journal of Microbiology*, International Research Journals, Norcross (GA), 2018-present.
435. Organizing committee member, *International Conference on Plastic Engineering & Polymer Science*, Tokyo (Japan), 2018-present.
436. Editor of the *Journal of Nanotechnology in Diagnosis and Treatment*, Savvy Science, 2018-present.
437. Editor of *Annals of Clinical Cancer and Therapy Journal*, Research Novelty, Bentonville (AR), 2018-present.
438. Editor of *African Journal of Biological Sciences*, Pinelands (Cape Town, South Africa), 2018-present.
439. Editor of the journal *International Journal of Molecular Sciences, Section Physical Chemistry and Chemical Physics*, MDPI, Basel (Switzerland), 2018-present.
440. Editor of the journal *Integrative Pharmacology and Clinical Science*, Open Access Text, London (UK), 2018-present.

441. Editor of *Journal of Multidisciplinary Research and Reviews*, Innovation Info, Cambridge (UK), 2018-present.
441. Organizing committee member, *International Conference on Polymer Science and Technology*, Amsterdam (Netherlands), 2018-present.
442. Editor of the journal *Cancer Open Access*, Edelweiss, Winfield (IL), 2018-present.
- 443 Congress grant, *European Physics Conference*, València (Spain), 2018.
444. Editor of *Journal of Ophthalmology and Vision Research*, eScientific, Lisle (IL), 2018-present.
445. Programme committee member, *IEEE International Symposium on Computer Vision and Machine Intelligence in Medical Image Analysis*, Sikkim (India), 2018-present.
446. Editor of the Journal *Carbon Materials*, EnPress, Tustin (CA), 2018-present.
447. Programme committee member, *IEEE Middle East & North Africa COMMUNICATIONS Conference*, Manama (Bahrain), 2018-present.
448. Editor of the *International Journal of Applied Science and Engineering Review*, Chronopub, Ratlam (Madhya Pradesh, India), 2018-present.
449. Scientific committee member, *International Conference on Biochemistry, Genetics & Molecular Research*, Dubai (United Arab Emirates), 2018-present.
450. Editor of the journal *Molecules*, Section Computational and Theoretical Chemistry, MDPI, Basel (Switzerland), 2018-present.

451. Editor of the journal *Advances in Chemical Research*, Open Biomedical, Beachwood (OH), 2018-present.
452. Editor of the journal *Condensed Matter Physics Report*, Whioce, Singapore (Singapore), 2018-present.
453. Organizing committee member, *International Bioinformatics and Biomedicine Conference*, Chicago (IL), 2018-present.
454. Technical programme committee member, *Annual International Conference on Material Science and Engineering*, Wuhan (Hubei, China), 2018-present.
455. Editor of *Knowledge Publishing Group*, Knowledge, Washington (DC), 2018-present.
456. Organizing committee member, *International Conference and Expo on Separation Techniques*, London (UK), 2019-present.
457. Editor of the *International Journal of Hematology and Blood Research*, Madridge, Pleasanton (CA), 2019-present.
458. Organizing committee member, *International Condensed Matter Physics Conference*, València (Spain), 2019-present.
459. Editor of the *Journal of Cancer Research and Clinical Practice*, Pubtexto, High Holborn (London, UK), 2019-present.
460. Editor of the *IOJPH Journal*, Iojph Journal, High Haymarket (NSW, Australia), 2019-present.

461. Editor of the journal *Composite Materials Research*, PiscoMed, Singapore (Singapore), 2019-present.
462. Editor of the journal *COJ Reviews & Research*, Crimson, New York (NY), 2019-present.
463. Technical program committee member, *Smart Cities Symposium*, Bahrain (Bahrain), 2019-present.
464. Scientific committee member, *International Conference on Ophthalmology & Optometry*, Dubai (United Arab Emirates), 2019-present.
465. Editor of the *Journal of Analytical Chromatography and Spectroscopy*, EnPress, Tustin (CA), 2019-present.
466. Editor of the Journal *Chemical Engineering and Nanotechnology*, Bio-Byword, Sydney (NSW, Australia), 2019-present.
467. Editor of the *International Journal of Computing and Digital Systems*, University of Bahrain, Bahrain (Bahrain), 2019-present.
468. Editor of the *Journal of Biomedical and Life Science*, Kenkyu, Schaumburg (IL), 2019-present.
469. Editor of the *Journal of Applied Sciences*, ReDelve, Columbus (OH), 2019-present.
470. Editor of the *Journal of Clinical Ophthalmology and Optometry*, Science Inquest, Detroit (MI), 2019-present.

471. Editor of the *Current Chinese Medical Sciences Journal*, Bentham Science, Beijing (China), 2019-present.
472. Programme committee member, *IEEE International Conference on Automatic Control and Intelligent Systems*, Shah Alam (Malaysia), 2019-present.
473. Editor of the *Forte Journal of Experimental & Clinical Cancer*, Forte Open, Tustin (CA), 2019-present.
474. Programme committee member, *International Symposium on Computational Intelligence & Applications*, Penang (Malaysia), 2019-present.
475. Editor of the *SCIREA Journal of Health*, Science Research Association, (), 2019-present.
476. Organizing committee member, *Global Conference on Nanotechnology and Materials Science*, València (Spain), 2019-present.
477. Editor of the *Forte Journal of Ophthalmology*, Forte Open, Tustin (CA), 2019-present.
478. Committee member, *World Chemical Science Congress*, Stockholm (Sweden), 2019-present.
479. Editor of the *United Journal of Oncology*, United Prime, Las Vegas (NV), 2019-present.
480. Editor of the *Journal of Clinical Medicine*, Science Research Association, 2019-present.

481. Editor of the *Journal of Composites and Biodegradable Polymers*, Savvy Science, 2019-present.
482. Organizing committee member, *World Congress on Functional Materials and Nanotechnology*, València (Spain), 2019-present.
483. Organizing committee member, *Euro Global Congress on Pharma, Vaccines & Immunology*, València (Spain), 2019-present.
484. Organizing committee member, *World Congress on Hematology and Oncology*, Paris (France), 2019-present.
485. Organizing committee member, *International Conference and Exhibition on Cancer & Therapeutics*, Kuala Lumpur (Malaysia), 2019-present.
486. Editor of the *Forte Journal of Cardiology*, Forte Open, Tustin (CA), 2019-present.
487. Editor of *Journal of Research Updates in Polymer Science*, Lifescience Global, Mississauga (Ontario, Canada), 2019-present.
488. Programme committee member, *International Conference on Innovation and Intelligence for Informatics, Computing, and Technologies*, Bahrain (Bahrain), 2019-present.
489. Editor of the journal *International Journal of Molecular Sciences, Section Molecular Informatics*, MDPI, Basel (Switzerland), 2019-present.
490. Editor of *Journal of Ophthalmological Science*, Journal of Ophthalmological Science, Grand Rapids (MI), 2019-present.

491. Editor of the journal *Infectious Diseases and Therapeutics*, Research Open, Isleworth (England), 2019-present.
492. Editor of the *International Journal of Vaccines and Technologies*, Pacsram, Naperville (IL), 2019-present.
493. Programme committee member, *IEEE International Conference on System Engineering and Technology*, Shah Alam (Malaysia), 2019-present.
494. Editor of the *Journal of Current Trends in Clinical Case Reports*, Research Novelty, Bentonville (AR), 2019-present.
495. Editor of the *International Journal of Physics Research and Applications*, Heighten Science Publications, Irving (TX), 2019-present.
496. Editor of the *Journal of Medicine & Biology*, Tridha Scholars, Noida (India), 2019-present.
497. Organizing committee member, *2<sup>nd</sup> World Nanotechnology Conference*, Philadelphia (PA), 2019-present.
498. Editor of the journal *Research and Application of Materials Science*, Viser Technology, Singapore (Singapore), 2019-present.
499. Editor of the *Journal of Basic & Applied Sciences*, SET, 2019-present.
500. Programme committee member, *International Conference on Sustainable Engineering and Creative Computing*, Bandung (Indonesia), 2019-present.

501. Editor of the *Journal of Cancer Research and Oncobiology*, Bioffin Access, London (UK), 2019-present.
502. Programme committee member, *International Conference on Computing and Network Communications*, Trivandrum (Kerala, India), 2019-present.
503. Programme committee member, *International Conference on Physics*, Beijing (China), 2019-present.
504. Editor of the *Journal of Materials Science and Metallurgy*, Scholarena, Warrensburg (MO), 2019-present.
505. Organizing committee member, *International Conference on Toxicology and Applied Pharmacology*, Dubai (United Arab Emirates), 2019-present.
506. Editor of the Journal *Insight – Carbon Materials*, PiscoMed, Singapore (Singapore), 2019-present.
507. Editor of the Journal *Astronomy and Space Science Reports*, Bibliotics, Houston (TX), 2019-present.
508. Editor of the *Clinical Journal of Ophthalmology and Eye Care*, SunKrist, Kompally (Rangareddi, India), 2019-present.
509. Editor of the *Interdisciplinary Journal of Medical Case Reports*, MeDread, Reno (NV), 2019-present.
510. Editor of the *Journal of Cancer Immunology*, Scientific Archives, Wilmington (DE), 2019-present.

511. Editor of the *Journal of Clinical Oncology & Therapeutics*, Scholars Literature, Lowell (MA), 2019-present.
512. Editor of *Enliven: Journal of Genetic, Molecular and Cellular Biology*, Enliven, Dover (DE), 2019-present.
513. Organizing committee member, *Global Congress and Expo on Physical, Inorganic and Analytical Chemistry*, Vancouver (Canada), 2019-present.
514. Scientific committee member, *International Conference on Nanotechnology and Nanomaterials*, Rome (Italy), 2019-present.
515. Program/Organizing committee member, *International Conference and Expo on Obesity and Diet Management*, Kuala Lumpur (Malaysia), 2019-present.
516. Organizing committee member, *Global Congress on Infectious Diseases and Clinical Microbiology*, Toronto (Canada), 2019-present.
517. Editor of the journal *Diabetes and Endocrinology*, Pubtexto, London (UK), 2019-present.
518. Editor of the *Madridge Journal of Case Reports & Studies*, Madridge, Pleasanton (CA), 2019-present.
519. Editor of the *European Journal of Medical Research and Clinical Trials*, JScholar, Sunnyvale (CA), 2019-present.
520. Programme committee member, *IEEE World Conference on Systems, Process and Control*, Malacca (Malaysia), 2019-present.

521. Organizing committee member, *World Congress on Graphene Technology & Materials Chemistry*, Kyoto (Japan), 2019-present.
522. Committee member, *World Congress on Quantum Mechanics and Nuclear Physics*, Prague (Czech Republic), 2019-present.
523. Editor, *International Conference on Green Materials and Environmental Engineering*, Guangzhou (China), 2019-present.
524. Organizing committee member, *Material Science Congress*, Rome (Italy), 2019-present.
525. Editor of the Journal *Current Chinese Medical Science*, Bentham Science, Sharjah (United Arab Emirates), 2019-present.
526. Organizing committee member, *International Conference and Expo on Proteomics and Metabolomics*, Montreal (Canada), 2019-present.
527. Organizing committee member, *International Summit on Cancer Research and Diagnosis*, Paris (France), 2019-present.
528. Programme committee member, *Conference on WATER in the MENA Region: Preparing for a Changing World*, Bahrain (Bahrain), 2019-present.
529. Organizing committee member, *World Congress on Patient Health Care for Chronic Diseases*, Prague (Czech Republic), 2019-present.
530. Committee member, *SciTech Central Pharma Pharmacology & Drug Development Congress*, Quatre Bornes (Mauritius), 2019-present.

531. Editor of the *Global Journal of Materials Science & Engineering*, Pubtexto, London (UK), 2019-present.
532. Editor of the *OSP Journal of Nanomedicine and Nanotechnology*, Open Scientific, London (UK), 2019-present.
533. Committee member, *Assembly of Advanced Materials Congress*, Stockholm (Sweden), 2019-present.
534. Editor of the *OSP Journal of Nuclear Science*, Open Scientific, London (UK), 2019-present.

## SCIENTIFIC SOCIETIES:

1. *Recreational and Educational Computing*, Pennsylvania State University, 1985-present.
2. *Molecular Graphics and Modelling Society*, University of York, 1990-2008.
3. *Société Française de Chimie*, 1991-92, 1 year.
4. *Molecular Electronics Group*, Technical University of Gdańsk, 1991-present.
5. *Who is who in Pattern Recognition*, Elsevier Science Publishers, 1993-present.
6. *The Molecular Modelling and Graphics Network*, University of York, 1996-present.
7. *Who's Who in the World®*, Marquis, New Providence (NJ), 1997-present.
8. Proyecto RAM (Recursos Académicos sobre Macintosh), Universidad de Zaragoza, 1997-present.
9. AIMED (The Association of Independent Macintosh Engineers and Developers), Los Angeles, 1997-present.
10. European Society of Mathematical Chemistry, Cluj (Romania), 1997-present.
11. Free Software Foundation, Cambridge (MA), 1997-present.
12. Directory of AI Professionals, Iverson Software, USA, 1997-present.
13. Directory of FORTRAN Professionals, Iverson Software, USA, 1997-present.
14. Dictionary of International Biography, International Biographical Centre, Cambridge, 1998-present.
15. International Forum of Educational Technology and Society, German National Research Center for Information Technology, 1998-present.
16. Outstanding People of the 20th Century, International Biographical Centre, Cambridge, 1998-present.
17. ChemWeb: The World Wide Club for the Chemical Community, ChemWeb, USA, 1998-present.
18. Forum on Computational and Quantum Chemistry, Yaroslav the Wise University of Novgorod, 1999-present.
19. Artificial Intelligence Researchers, 1999-present.
20. 2000 Outstanding Intellectuals of the 20th Century, International Biographical Centre, Cambridge, 1999-present.

21. The Cheminformatics and QSAR Society, Bonn, 2000-present.
22. 2000 Outstanding Scholars of the 20th Century, International Biographical Centre, Cambridge, 2000-present.
23. Foresight Institute, Palo Alto (CA), 2000-present.
24. Sociedad Hispánica de Antropología Filosófica, Seville, 2000-2002.
25. Working Party on Computational Chemistry European Computational Chemists, Federation of European Chemical Societies, Budapest, 2000-present.
26. Who's Who *in Science and Engineering*®, Marquis, New Providence (NJ), 2000-present.
27. ChemBench.com: Where Chemists Meet and Work, ChemBench, USA, 2001-present.
28. American Association for the Advancement of Science, Washington, 2001-present.
29. 2000 Outstanding Intellectuals of the 21<sup>st</sup> Century, International Biographical Centre, Cambridge, 2001-present.
30. Man of Achievement, International Biographical Centre, Cambridge, 2002-present.
31. Who's Who of Professionals, Who's Who Historical Society, Boston (MA), 2002-present.
32. The Science Advisory Board, Washington, 2002-present.
33. Order of Excellence, International Biographical Centre, Cambridge, 2002-present.
34. One Thousand Great Intellectuals, International Biographical Centre, Cambridge, 2002-present.
35. 2000 Outstanding Intellectuals of the 21<sup>st</sup> Century, International Biographical Centre, Cambridge, 2002-present.
36. 21<sup>st</sup> Century Award for Achievement, International Biographical Centre, Cambridge, 2002-present.
37. Who's Who Award for Achievement, International Biographical Centre, Cambridge, 2002-present.
38. International Man of the Year, International Biographical Centre, Cambridge, 2003-present.
39. The Worldwide Honours List, International Biographical Centre, Cambridge, 2003-present.
40. Physics Applied to Biology and Medicine, Latin American Center of Physics, Rio de Janeiro (Rio de Janeiro, Brazil), 2003-present.

41. Living Legends, International Biographical Centre, Cambridge, 2003-present.
42. *Who's Who in American Education*®, Marquis, New Providence (NJ), 2003-present.
43. SciTechMed Information Service, Mardev, Sutton (UK), 2005-present.
44. American Chemical Society, Washington (DC), 2006 (3 months) and 2007.
45. International Congress of Chemistry and Environment, Vijay Nagar (Indore, India), 2006-present.
46. International Society of Biotechnology, Vijay Nagar (Indore, India), 2006-present.
47. Massachusetts Institute of Technology Open Course Ware, Portal Universia, Boadilla del Monte (Madrid, Spain), 2007-present.
48. Objectif Sciences: Association Nationale et Internationale de Culture Scientifique et Technique, St. Anthème (France), 2007-present.
49. Centre d'Estudis del Camp de Morvedre, Sagunt (València), 2007-present.
50. Redes de Investigación en Medicamentos, Fundación Farmaindustria, Madrid, 2007-present.
51. Associació d'Ambientòlegs Bonamira, València, 2007-present.
52. Project on an Integral and Integrative Perspective on Engineering and Meta-Engineering, International Institute of informatics and Systemics, Orlando (FL), 2008-present.
53. Group of Interest in Cooperative Learning, Universitat Poliècnica de Catalunya, Barcelone, 2008-present.
54. The Drug Design Resource, BioVillage, Cambridge (England), 2008-present.
55. Servicio de Información y Noticias Científicas, Ministerio de Educación y Ciencia, Madrid, 2008-present.
56. The Electrochemical Society, Pennington (NJ), 2009-2010.
57. European Network for Light Ion Hadron Therapy (ENLIGHT), European Organization for Nuclear Research (CERN), Geneva (Switzerland), 2009-present.
58. SPEEDUP Society: The SWISS forum for Grid and High Performance Computing, Zurich (Switzerland), 2009-present.
59. ATS-Association Tourisme Solidaire, Beauvais (France), 2009-present.
60. *Princeton Who's Who Registry among Executives and Professionals*, Princeton Who's Who, Babylon (NY), 2009-present.

61. Membership, *Arab Materials Science and Nanotechnology Network*, Arab Science and Technology Foundation, Sharjah (United Arab Emirates), 2010-present.
62. Membership, *TheScientist Community*, The Scientist, Philadelphia (PA), 2010-present.
63. Membership, *Elsevier Reviewing/Editing Board*, Elsevier (Holland), Amsterdam, 2010-present.
64. Membership, *Asociación para la Promoción de la Química Teórica y Computacional*, Universidad Autónoma de Madrid, Cantoblanco (Madrid, Spain), 2010-present.
65. Membership, Society of Plastics Engineers, Newtown (Connecticut), 2010-2011 (1 year).
66. Membership, Forum of Professionals and Executives, Continental Broadcasting Network, Smithtown (NY), 2011-present.
67. Membership, LinkedIn Toxicology and Drug Metabolism Research, Informa Healthcare, New York (NY), 2011-present.
68. Membership, American Nano Society, Green Cove Springs (FL), 2011-present.
69. Membership, PharmaPanel, Kennebunk (ME), 2011-present.
70. Membership, Medical Research Support, Vienna (Austria), 2011-present.
71. Membership, WebmedCentral, London (UK), 2011-present.
72. Membership, BioCrowd – An Online Community for Bioprofessionals, East Windsor (New Jersey), 2012-present.
73. Membership, The Minerals, Metals and Materials Society, Warrendale (PA), 2013 (3 months).
74. Membership, Spanish Drug Discovery Network, 2013 -present.
75. Membership, Life Science Network, Heidelberg (Germany), 2014 -present.
76. Membership, Guía de Centros de Descubrimiento Temprano de Fármacos, Spanish Drug Discovery Network, 2015-present.
77. Membership, Uso de Tecnologías Educativas en Secundaria, Universidad Politécnica de Valencia, 2015-present.
78. Membership, MedChemNet, Future Science Group, London (UK), 2015-present.
79. Membership, Platform PoliformaT, Universitat Politècnica de València, València (Spain), 2015-present.
80. Membership, Red Española de Científicos Emprendedores, Universitat de València, València (Spain), 2016-present.

81. Membership, Grup de Treball d'Història de la Ciència i Ensenyament, Universitat de València, València (Spain), 2017-present.
82. Membership, Sociedad para el Estudio de la Matemática y de la Física, València (Spain), 2017-present.
83. Member of the Condensed Matter Physics Journal Club, Universitat de València, 2018-present.
84. Member of the Society of African Journal Editors, 2018-present.
85. Member of Ciencia sin Barreras, Universidad Autónoma de Madrid, Madrid (Spain), 2018-present.

## RELEVANT EMPLOYMENT:

1. Doctoral Dissertation Research, Universitat de València, 1985-90.
2. Research Project, *Chair*. Enrique Ortí, *Tit*. Caracterización de la Estructura Electrónica de Materiales Orgánicos Conductores de la Electricidad, *Trans*. Characterization of the Electronic Structure of Electrically Conductive Organic Materials, Universitat de València Project 421/89, 1989-90, 1 year.
3. Research Project, *Chair*. Ignacio José Nebot-Gil, *Tit*. Estudio Teórico de Nuevos Materiales Orgánicos Conductores de la Electricidad. Desarrollo Metodológico y Determinación de la Estructura Electrónica, *Trans*. Theoretical Study of New Electrically Conductive Organic Materials. Methodological Development and Electronic Structure Determination, D.G.I.C.Y.T. Project PS88-0112, 1989-1992, 3 years.
4. Assistant Professor, Universitat de València, 1990-95.
5. Stage, postdoctoral, research Project, *Chair*. Jean-Louis Rivail, *Tit*. Protein Modelling, Université de Nancy I, Nancy, France, 1991-1992, 1 year.
6. Chercheur Associé, Centre National de la Recherche Scientifique URA510, Nancy, France, 1991, 6 months.
7. Research Project, *Chair*. Jean-Louis Rivail, GS (Groupment Scientifique) *Modelisation Moleculaire*, IBM-CNRS-Université de Nancy I, Nancy, France, 1991, 6 months.
8. Lecturer in Physical Chemistry, Universitat de València, 1995-present.
9. Research Project, *Chair*. Francisco Tomás, *Tit*. Correlación Electrónica. Desarrollos Metodológicos con Hamiltonianos Intermediarios y Coupled Cluster. Aplicaciones, *Trans*. Electronic Correlation. Methodological Developments with Intermediary Hamiltonians and Coupled Cluster. Applications, C.A.I.C.Y.T. Project PB94-0993, 1995-1998, 3 years.
10. Research Project, *Chair*. José Sánchez-Marín, *Tit*. Desarrollo y Aplicaciones de Métodos de Correlación Electrónica de Alta Precisión Mono y Multirreferenciales, *Trans*. Development and Applications of High-Precision Mono- and Multireferential Electronic Correlation Methods, MEC DGES Project PB97-1383, 1998-2001, 3 years.

11. Member of the Institut Universitari de Ciència Molecular, *Trans.* Institute for Molecular Science, Universitat de València, 2000-present.
12. Research Project, *Chair.* José Sánchez-Marín, *Tit.* Desarrollo y Aplicación de Métodos Cuánticos de Alta Precisión, *Trans.* Development and Application of High-Precision Quantum Methods, M.C.T. (Plan Nacional I+D+i) Project BQU2001-2935-C02-01, 2001-2004, 3 years.
13. Research Project, *Chair.* Manuel Yáñez, *Tit.* Red de Excelencia en Química Teórica y Computacional, *Trans.* Excellence Network in Theoretical and Computational Chemistry, MCT (Plan Nacional I+D+i) Project BQU2001-5037-E, 2001-2004, 3 years.
14. Research Project, *Chair.* Ignacio José Nebot-Gil, *Tit.* Desarrollos Metodológicos y Aplicaciones de Métodos Cuánticos, *Trans.* Methodological Developments and Applications of Quantum Methods, MEC DGcyT Project CTQ2004-07768-C02-01/BQU and EU (FEDER program), 2004-2007, 3 years.
15. Research Project, *Chair.* Francisco Torrens, *Tit.* TOMOCOMD–CARDD, un Promisorio Enfoque para el Diseño *Racional* de Fármacos Asistido por Ordenadores y un Novedoso Método para el *Screening* Virtual de Nuevas Entidades Químicas Potencialmente Bioactivas, *Trans.* TOMOCOMD– CARDD, a Promising Approach for the Computer-Aided *Rational* Drug Design and a Novel Method for the Virtual Screening of New Chemical Entities Potentially Bioactive, Universitat de València, Stage of Yovani Marrero, 2005-2006 (6 months).
16. Research Project, *Chair.* José Sánchez-Marín, *Tit.* Ayuda a Grupos de Investigación, *Trans.* Aid to Research Groups, Generalitat Valenciana Project COMP06-147, 2006-2007 (1 year).
17. Research Project, *Chair.* Francisco Torrens, *Tit.* Molecular Modelling and Chemistry-Computer Applications for the Description and Prediction of Molecular Properties, Universitat de València–Mediscovery, 2006-2007 (1 year).
18. Research Project, *Chair.* Francisco Torrens, *Tit.* Desarrollo e Integración de un Sistema Computacional para el Descubrimiento de Fármacos Activos contra las Pandemias del SIDA, Cáncer y otras Enfermedades Microbianas de Gran Impacto Social, *Trans.* Development and Integration of a Computational System for the Discovery of Active Drugs against the AIDS, Cancer Pandemics and other Microbial Diseases of High Social Impact, Universitat de València, Stage of Yovani Marrero, 2007 (6 months).
19. Research Project, *Chair.* Francisco Torrens, *Tit.*, Puesta en Marcha de una Revista de Divulgación Científico-Tecnológica y de Género, *Trans.* Starting an Electronic Journal of Scientific-Technological and Gender Spreading, Ministerio de Educación y Ciencia–Año de la Ciencia 2007–FECYT, CCT005-07-00365, 2007 (1 year).
20. Research Project, *Chair.* Francisco Torrens, *Tit.* Diseño Computacional, Obtención Química y Evaluación Biológica de Nuevos Fármacos Antiprotozoarios y Anticancerígenos, *Trans.* Computational Design, Chemical Obtaining and Biological Evaluation of New Antiprotozoal and Anticancer Drugs, Universitat de València, Stage of Yovani Marrero Ponce, 2007 (4 months).

21. Research Project, *Chair*. Francisco Torrens, *Tit*. Predicción del Impacto Medioambiental de Sustancias Químicas Usando Herramientas Quimioinformáticas, *Trans*. Prediction of the Environmental Impact of Chemical Substances Using Chemobioinformatics Tools, Universitat de València, Stage of Juan Alberto Castillo Garit, 2008 (6 months).
22. Research Project, *Chair*. Francisco Torrens, *Tit*., Descubrimiento de Nuevos Inhibidores de la Tirosinasa: Diseño Computacional, Síntesis, Caracterización y Corroboración Experimental, *Trans*. Discovery of New Inhibitors of Tyrosinase: Computational Design, Synthesis, Characterization and Experimental Corroboration, Stage of Gerardo Maikel Casañola, Universitat de València, 2008 (4 months).
23. Research Project, *Chair*. Francisco Torrens, *Tit*. Búsqueda de Nuevos Agentes Antimicrobianos que Inhiban la Síntesis de la Pared Celular Bacteriana, *Trans*. Search for New Antimicrobial Agents that Inhibit the Synthesis of the Bacterial Cell Wall, Stage of Yovani Marrero Ponce, Universitat de València, 2010 (6 months).
24. Research Project, *Chair*. Antonio Correia, *Tit*. M4Nano, Ministerio de Ciencia e Innovación, 2010-2013 (3 years).
25. Research Project, *Tit*. Researcher's Night 2010 of the People Programme of the Seventh Framework Programme, Universitat de València, European Union, 2010.
26. Research Project, *Chair*. Jesús Salgado, *Tit*. Dominios activos mínimos de proteínas de la familia Bcl-2, *Trans*. Minimal active domains of proteins of the Bcl-2 family, Ministerio de Ciencia e Innovación, BFU2010-19118, 2011-2013, 3 years.
27. Research Project, *Chair*. Manuel Alcamí, *Tit*. Plataforma Tecnológica de Computación Química, *Trans*. Technological Platform of Chemical Computation, Ministerio de Ciencia e Innovación, 2011-2014, 3 years.
28. Research Project, *Chair*. Francisco Torrens, *Tit*. Desarrollo y Aplicación de Métodos y Técnicas de Química Cuántica a Estudios de Fármacos, *Trans*. Development and Application of Quantum Chemistry Methods and Techniques to Studies of Drugs, Stage of Juan Garro, CONICET, Argentina, 2012, 2 months.
29. Research Project, *Chair*. José Sánchez Marín, *Tit*. Servidor INTEL XEONES-2660 y 16 nodos de cálculo, *Trans*. Server INTEL XEONES-2660 and 16 computing nodes, Universitat de València, Convocatòria Adquisició d'Equipament Científic, 2014.
30. Research Project, *Chair*. Jesús Salgado, *Tit*. Análisis de poros de BAX a escala nanométrica, *Trans*. Analysis of pores of BAX at nanometric scale, Ministerio de Economía y Competitividad, BFU2013-41648-P, 2014-2016, 3 years.

31. Research Project, *Chair*. Gloria Castellano, *Tit*. Estudio de la capacidad antioxidante *in vivo* de compuestos fenólicos mediante modelización QSAR/QSPR: Paso de la barrera hematoencefálica e interacciones con citocromos y fármacos, *Trans*. Study of the *in vivo* antioxidant capacity of phenolic compounds through QSAR/QSPR modelling: Crossing of the blood-brain barrier and interactions with cytochromes and drugs, Universidad Católica de Valencia *San Vicente Mártir*, PRUCV/2015/617, 2016-2017, 1 year.
32. Research Project, *Chair*. Gloria Castellano, *Tit*. Estudio de la capacidad antioxidante *in vivo* de compuestos fenólicos mediante modelización QSAR/QSPR: Paso de la barrera hematoencefálica e interacciones con citocromos y fármacos, *Trans*. Study of the *in vivo* antioxidant capacity of phenolic compounds through QSAR/QSPR modelling: Crossing of the blood-brain barrier and interactions with cytochromes and drugs, Universidad Católica de Valencia *San Vicente Mártir*, 2017, 1 year.
33. Research Project, *Chair*. Gloria Castellano, *Tit*. Estudio teórico y experimental de la capacidad oxidativa de distintos aceites. Efecto de adición de antioxidantes de origen vegetal, *Trans*. Theoretical and experimental study of the oxidative capacity of different oils. Effect of addition of antioxidants from vegetable origin, Universidad Católica de Valencia *San Vicente Mártir*, 2017, UCV.PRO.17-18.AIV.03, 2 years.
34. Research Project, *Chair*. Gloria Castellano, *Tit*. Estudio teórico y experimental de la estabilidad oxidativa de distintas margarinas. Efecto de adición de antioxidantes de origen vegetal, *Trans*. Theoretical and experimental study of the oxidative capacity of different margarines. Effect of addition of antioxidants from vegetable origin, Universidad Católica de Valencia *San Vicente Mártir*, 2019, 2019-217-001, 2 years.

## IMPARTED COURSES

1. PhD Course: Simulación Molecular, *Trans.* Molecular Simulation, 30h, Departament de Química Física, Universitat de València, 1991-1994.
2. PhD Course: Inteligencia Artificial en Química, *Trans.* Artificial Intelligence in Chemistry, 30h, Departament de Química Física, Universitat de València, 1995-1999.
3. Eurocourse: Solvent Selection for Pesticide Residue Analysis, 27h, Division of Analytical Chemistry of the French Electrochemical Society, Angers (France), October 6-9, 1997.
4. 7<sup>th</sup> Seminars of Advanced Studies on Molecular Design and Bioinformatics, 35h, Universidad de La Habana, Havana (Cuba), August 24-28, 2009.

## PARTICIPATION IN ACADEMIC ORGANS:

1. Comisión de Contratación, *Trans.* Employment Commission, Facultat de Química, Universitat de València, 1992-present.
2. Comisión de Revisión de Exámenes, *Trans.* Examination Revision Commission, Facultat de Química, Universitat de València, 1997-present.
3. Comisión de Contratación, *Trans.* Employment Commission, Departament de Química Física, Universitat de València, 1998-present.
4. Member of the Institut Universitari de Ciència Molecular, *Trans.* Molecular Science Institute, Universitat de València, 2000-present.
5. Tribunal del Trabajo de Fin de Grado, *Trans.* Graduate Final Project Board of Examiner, Faculty of Chemistry, Universitat de València, 2003-present.
6. Grupo de Trabajo sobre Ambientalización Curricular de la Titulación de Química, *Trans.* Working Group on Curricular Environmentalism of the Chemical Degree, Facultat de Química, Universitat de València, 2005-present.
7. Comisión de Coordinación del Doctorado Interuniversitario con Mención de Calidad de Química Teórica y Computacional/Theoretical and Computational Chemistry, *Trans.* Commission of Coordination of the Interuniversity Doctorate with Quality Mention on Theoretical and Computational Chemistry, Institut Universitari de Ciència Molecular, Universitat de València, 2007-present.
8. Grupo de Trabajo sobre el Máster de Profesor de Bachillerato, Secundaria y FP, *Trans.* Working Group on the Master of Teacher of Higher Certificate, Lower Examination and Certificate in Technical Studies, Facultat de Química, Universitat de València, 2008-present.
9. Grupo de Trabajo EXPOCIENCIA, *Trans.* Working Group EXPOSCIENCE, Parc Científic, Universitat de València, 2009-present.
10. Tribunal del Trabajo de Fin de Grado, *Trans.* Graduate Final Project Board of Examiner, Faculty of Pharmacy, Universitat de València, 2013-present.

11. Tribunal del Trabajo de Fin de Grado, *Trans.* Graduate Final Project Board of Examiner, Department of Physical Chemistry, Universitat de València, 2014-present.

12. Comisión de Selección de Personal Contratado de Carácter Temporal, *Trans.* Commission of Selection of Recruit Staff of Temporary Character, Faculty of Chemistry, Universitat de València, 2018- present.

## AREAS OF RESEARCH COMPETENCE:

1. Hartree-Fock Potential: Basis Set Superposition Error (BSSE), Hartree-Fock with Dispersion correction (HFD), HFD Potential Surfaces Optimization.
2. Configuration Interaction, Electronic correlation, Intermediate Hamiltonians, Coupled Cluster, Dressed CI, Natural orbitals.
3. Molecular Simulation: Molecular Modelling, Molecular Design, Rational Drug Design.
4. Potential Energy Surfaces: Geometry Optimization, Variable Metric Methods, Quasi Newton- Raphson Methods, Steepest-Descent Method, non-Derivative Methods, SIMPLEX Algorithm, Multivalley Hipersurfaces.
5. Supramolecular Chemistry: Intermolecular Interactions, Molecular Associations, Hydrogen-Bonding, Atom-Atom Pair Potential.
6. Artificial Intelligence in Chemistry. Molecular recognition. Molecular classification.
7. Mathematical Chemistry: Graph Theory, Molecular Topology, Molecular Connectivity, Topological Indices, Kekulé Structure Count, Regression, Principal Component Analysis, Cluster Analysis.
8. Molecular Infography: Modelling of Molecular Structures and Properties, Electrostatic, Geometrical and Topological Characterization of Molecules, Molecular Graphics, Representation of Chemical Properties.
9. High Performance Computing: VS-FORTRAN, Debugger, Optimization, Vectorization, E.S.S.L. Vectorized Library.
10. Quantitative Structure–Property (QSPR) and –Activity (QSAR) Relationships: Optimization of Correlation Weights of Local Graph Invariants.

## PUBLICATIONS:

1. F. Torrens, J. Sánchez-Marín, E. Ortí and I. Nebot-Gil,  
Incorporation of a dispersion energy term to Fraga's atom-atom pair intermolecular potential.  
Application to benzene, *s*-tetrazine, and their mixed dimers,  
*J. Chem. Soc., Perkin Trans. 2*, 943-950 (1987).
2. P. Lahuerta, R. Martínez, F. Torrens, A. Cantarero and F. Sanz,  
Orthometallation reactions in rhodium compounds containing orthohalooarylphosphines. Part 4. Crystal  
structures of  $\text{RhCl}_2[(\text{C}_6\text{H}_4)\text{P}(\text{Ph})_2][\text{P}(o\text{-ClC}_6\text{H}_4)(\text{Ph})_2]$ ,  
*J. Chem. Res. (S)*, 22-23 (1988).
3. P. Lahuerta, R. Martínez, F. Torrens, A. Cantarero and F. Sanz,  
Orthometallation reactions in rhodium compounds containing orthohalooarylphosphines. Part 4. Crystal  
structures of  $\text{RhCl}_2[(\text{C}_6\text{H}_4)\text{P}(\text{Ph})_2][\text{P}(o\text{-ClC}_6\text{H}_4)(\text{Ph})_2]$ ,  
*J. Chem. Res. (M)*, 261-272 (1988).
4. F. Torrens, A. M. Sánchez de Merás and J. Sánchez-Marín,  
The use of *ab initio* net charges to improve Fraga's atom-atom pair potential for molecular association,  
*J. Mol. Struct. (THEOCHEM)*, **166**, 135-140 (1988).
5. F. Torrens, J. Sánchez-Marín and E. Sánchez-Pérez,  
Didàctica empírica de la congelació de l'aigua, in: *Actes del II Simposium sobre L'Ensenyament de les  
Ciències Naturals*, Ed. S. Riera,  
Documents No. 11,  
Eumo, Vic, 1989, pp. 595-600.
6. F. Torrens, J. Sánchez-Marín and E. Sánchez-Pérez,  
Estudi interdisciplinari de la congelació de l'aigua, in: *Actes del II Simposium sobre L'Ensenyament de  
les Ciències Naturals*, Ed. S. Riera,  
Documents No. 11,  
Eumo, Vic, 1989, p. 669.
7. F. Torrens, E. Sánchez-Pérez and J. Sánchez-Marín,  
Didáctica empírica de la forma molecular,  
*Enseñanza de las Ciencias, Número Extra (III Congreso)(1)*, 267-268 (1989).
8. F. Torrens, R. Montañana and J. Sánchez-Marín,  
Vectorizing pair-potential AMYR program for the study of molecular associations, in: *High  
Performance Computing I*, Eds. J.-L. Delhaye and E. Gelenbe,  
Elsevier, Amsterdam, 1989, pp. 299-308.
9. F. Torrens, J. Sánchez-Marín and F. Tomás,  
Intermolecular calculations on azine dimers,  
*J. Chem. Res. (S)*, 176-177 (1990).
10. F. Torrens, J. Sánchez-Marín and F. Tomás,  
Intermolecular calculations on azine dimers,  
*J. Chem. Res. (M)*, 1401-1455 (1990).

11. F. Torrens, E. Ortí and J. Sánchez-Marín,  
Structural and charge effects on the phthalocyanine dimer, in: *Physical Chemistry Modelling of Molecular Structures and Properties XLIV*, Ed. J.-L. Rivail,  
Stud. Phys. Theor. Chem. No. 71,  
Elsevier, Amsterdam, 1990, pp. 221-228.
12. A. M. J. Sánchez de Merás, F. Torrens and I. Nebot-Gil,  
The use of polarized atomic orbitals in the initial guess in MCSCF calculations,  
*J. Mol. Struct. (THEOCHEM)*, **208**, 1-6 (1990).
13. F. Torrens,  
*Asociaciones Moleculares en Azinas y Macrociclos. Aplicación del Potencial Intermolecular de Fraga*,  
*Trans. Molecular Associations in Azines and Macrocycles. Application of Fraga's Intermolecular Potential*, Col.lecció Tesis Doctorals Microfitxa No. 755-3,  
Universitat de València, València, 1991, 291 pp.
14. F. Torrens, E. Ortí and J. Sánchez-Marín,  
Electrically conductive phthalocyanine assemblies. Structural and non-integer oxidation number considerations, in: *Lower-Dimensional Systems and Molecular Electronics*, Eds. R.M. Metzger, P. Day and G.C. Papavassiliou,  
NATO-ASI Ser. B No. 248,  
Plenum Press, New York, 1991, pp. 461-466.
15. F. Torrens, E. Ortí and J. Sánchez-Marín, Representación de propiedades moleculares en la didáctica de la Química, in: *Colloquy University Pedagogy*, Horsori, Barcelone, 1991, pp. 375-379.
16. F. Torrens, E. Ortí and J. Sánchez-Marín,  
Pair potential calculation of molecular associations. A vectorized version,  
*Comput. Phys. Commun.*, **66**, 341-362 (1991).
17. F. Torrens, E. Ortí and J. Sánchez-Marín,  
Calculation of geometrical descriptors and topological indices of molecules. A vectorized program, in: *High Performance Computing II*, Eds. M. Durand and F. El Dabaghy,  
Elsevier, Amsterdam, 1991, pp. 549-560.
18. F. Torrens, E. Ortí and J. Sánchez-Marín,  
Improved AMYR program: An algorithm for the theoretical simulation of molecular associations, including geometrical and topological characterization of the dimers,  
*J. Mol. Graphics*, **9**, 254-256 (1991).
19. F. Torrens, E. Ortí and J. Sánchez-Marín,  
Vectorized TOPO program for the theoretical simulation of molecular shape,  
*J. Chim. Phys. Phys.-Chim. Biol.*, **88**, 2435-2441 (1991).
20. F. Torrens, E. Ortí and J. Sánchez-Marín,  
Vectorized TOPO program for the theoretical simulation of molecular shape, in: *Advances in Biomolecular Simulations*, Eds. R. Lavery, J.-L. Rivail and J. Smith,  
AIP Conference Proceedings Series No. 239,  
American Institute of Physics, New York, 1991, p. 118.

21. F. Torrens, C. Voisin and J.-L. Rivail,  
Electric polarization in a force field for the study of dipeptide models, in: *Computing Methods in Applied Sciences and Engineering X*, Ed. R. Glowinski,  
Nova Science, New York, 1991, pp. 249-258.
22. J. Rodríguez, J. Sánchez-Marín, F. Torrens and F. Ruette,  
Molecular aggregation of polycyclic aromatic hydrocarbons. A theoretical modelling of coronene aggregation,  
*J. Mol. Struct. (THEOCHEM)*, **254**, 429-441 (1992).
23. F. Torrens, M. Ruiz-López, C. Cativiela, J. I. García and J. A. Mayoral,  
Conformational aspects of some asymmetric Diels–Alder reactions. A molecular mechanics + polarization study,  
*Tetrahedron*, **48**, 5209-5218 (1992).
24. M. Rubio, F. Torrens and J. Sánchez-Marín,  
Are most of the stationary points in a molecular association minima? An application of Fraga's potential to benzene-benzene,  
*J. Comput. Chem.*, **14**, 647-654 (1993).
25. F. Torrens, J. Sánchez-Marín and J.-L. Rivail,  
Interacting induced dipoles polarization in a force field for dipeptide models (glycine derivative),  
*An. Fís.*, **90**, 197-204 (1994).
26. F. Torrens, J. Sánchez-Marín and I. Nebot-Gil,  
Torsional effects on the molecular polarizabilities of the benzothiazole (A)-benzobisthiazole (B) oligomer A-B<sub>13</sub>-A,  
*J. Mol. Graphics*, **14**, 245-259+277 (1996).
27. F. Torrens  
Theoretical characterization of iron and manganese porphyrins for catalyzed saturated alkane hydroxylations,  
*J. Mol. Catal. A*, **119**, 393-403 (1997).
28. F. Torrens, J. Sánchez-Marín and I. Nebot-Gil,  
POLAR: Program for interacting induced dipoles polarization in a force field, in: *Electronic Scientific and Engineering Applications of the Macintosh I*, Eds. D. Graham and B. Jezl,  
MacSciTech, New York, 1997, 45 pp.
29. F. Torrens, J. Sánchez-Marín and I. Nebot-Gil,  
Interacting induced dipoles polarization model for molecular polarizabilities. Application to benzothiazole (A)-benzobisthiazole (B) oligomers: A-B<sub>13</sub>-A,  
*J. Mol. Struct. (THEOCHEM)*, **426**, 105-116 (1998).
30. F. Torrens, J. Sánchez-Marín and I. Nebot-Gil,  
Fractals for hybrid orbitals in protein models, in: *Information Technology Applications in Biomedicine*, ed: S. Laxminarayan,  
IEEE, Washington, 1998, 6 pp.

31. F. Torrens, M. Rubio and J. Sánchez-Marín,  
AMYR 2: A new version of a computer program for pair potential calculation of molecular associations,  
*Comput. Phys. Commun.*, **115**, 87-89 (1998).
32. F. Torrens, J. Sánchez-Marín and I. Nebot-Gil,  
Universal model for the calculation of all organic solvent–water partition coefficients,  
*J. Chromatogr., A*, **827**, 345-358 (1998).
33. F. Torrens, J. Sánchez-Marín and I. Nebot-Gil,  
Characterizing cavities in model inclusion molecules: A comparative study,  
*J. Mol. Graphics Model.*, **16**, 57-71 (1998).
34. F. Torrens, J. Sánchez-Marín and I. Nebot-Gil,  
Interacting induced dipoles polarization model for molecular polarizabilities. Reference molecules,  
amino acids and model peptides,  
*J. Mol. Struct. (THEOCHEM)*, **463**, 27-39 (1999).
35. F. Torrens, J. Sánchez-Marín and I. Nebot-Gil,  
Polarization by the effect of a small torsional change in the benzothiazole (A)-benzobisthiazole (B)  
oligomer A-B<sub>13</sub>-A,  
*Molecules*, **4**, 28-51 (1999).
36. F. Torrens,  
Aqueous coefficient calculations for chemicals and drugs,  
*Toxicol. Environ. Chem.*, **73**, 177-189 (1999).
37. F. Torrens, J. Sánchez-Marín and I. Nebot-Gil,  
Polarization by the effect of a small torsional change in the benzothiazole (A)-benzobisthiazole (B)  
oligomer A-B<sub>13</sub>-A, in: *Synthetic Organic Chemistry II*, Eds. S.-K. Lin and E. Pombo-Villar,  
MDPI, Basel, 1999, pp. 1-9.
38. F. Torrens, J. Sánchez-Marín and I. Nebot-Gil,  
A universal model for all organic solvent/water partition coefficients. Local *log P* maps near selected  
atoms, in *Chemical Structures*, Ed. J. Gasteiger,  
University of Erlangen, Nürnberg, 1999, pp. 1-1.
39. F. Torrens, J. Sánchez-Marín and I. Nebot-Gil,  
SCAP: A universal program for the calculation of solubility in organic solvents, in water and partition  
coefficient, in: *Solvent Selection for Pesticide Residue Analysis*, Ed. J. Fournier,  
Federation of European Chemical Societies, Angers, 10 pp., 1999.
40. F. Torrens,  
Filogénesis de los simios antropoides,  
*Encuentros en la Biología*, **1**(60), 3-5 (2000).

41. F. Torrens,  
Universal organic solvent-water partition coefficient model,  
*J. Chem. Inf. Comput. Sci.*, **40**, 236-240 (2000).
42. F. Torrens,  
Análisis fractal de la estructura terciaria de las proteínas,  
*Encuentros en la Biología*, **1**(64) 4-6 (2000).
43. F. Torrens,  
Fractal hybrid orbitals in biopolymer chains,  
*Zh. Fiz. Khim.*, **74**, 125-131 (2000).
44. F. Torrens,  
Fractal hybrid orbitals in biopolymer chains,  
*Russ. J. Phys. Chem. (Engl. Transl.)*, **74**, 115-120 (2000).
45. F. Torrens,  
Molecular polarizability of  $Sc_n$ ,  $C_n$  and endohedral  $Sc_n@C_m$  clusters,  
*Microelectron. Eng.*, **51-52**, 613-626 (2000).
46. F. Torrens,  
Polarization force fields for peptides implemented in ECEPP2 and MM2,  
*Mol. Simul.*, **24**, 391-410 (2000).
47. F. Torrens,  
Resolution enhancement with nonlinear gradient filtering, in: *Information Fusion II*, Ed. E. Blasch,  
International Society of Information Fusion, Silicon Valley (California), 2000, pp. 1-10.
48. F. Torrens,  
Characterizing cavities in model inclusion fullerenes: A comparative study, in: *Synthetic Organic Chemistry IV*, Eds. T. Wirth, C. O. Kappe, E. Felder, U. Diederichsen and S.-K. Lin,  
MDPI, Basel, 2000, pp. 1-14.
49. F. Torrens,  
Calculation of partition coefficient and hydrophobic moment of the secondary structure of lysozyme,  
*J. Chromatogr., A*, **908**, 215-221 (2001).
50. F. Torrens, J. Sánchez-Marín and I. Nebot-Gil,  
New dimension indices for the characterization of the solvent-accessible surface,  
*J. Comput. Chem.*, **22**, 477-487 (2001).

51. F. Torrens,  
Molecular polarizability of Sc and C (*fullerene* and *graphite*) clusters,  
*Molecules*, **6**, 496-509 (2001).
52. F. Torrens,  
Characterizing cavities in model inclusion fullerenes: A comparative study,  
*Int. J. Mol. Sci.*, **2**, 72-89 (2001).
53. F. Torrens,  
Free energy of solvation and partition coefficients in methanol–water binary mixtures,  
*Chromatographia*, **53**, S199-S203 (2001).
54. F. Torrens,  
A new topological index to elucidate apolar hydrocarbons,  
*J. Comput.-Aided Mol. Design*, **15**, 709-719 (2001).
55. F. Torrens,  
Fractals for hybrid orbitals in protein models,  
*Complexity Int.*, **8**, torren01-1-13 (2001).
56. F. Torrens,  
Fractal hybrid orbitals analysis of tertiary structure of protein molecule, in: *Synthetic Organic Chemistry V*, Eds. O. Kappe, P. Merino, A. Marzinzik, H. Wennemers, T. Wirth, J.-J. vanden Eynde and S.-K. Lin, MDPI, Basel, 2001, pp. 1-11.
57. F. Torrens,  
Fractal hybrid orbitals analysis of the tertiary structure of protein molecules,  
*Molecules*, **7**, 26-37 (2002).
58. F. Torrens,  
Molecular polarizability of semiconductor clusters and nanostructures,  
*Physica E*, **13**, 67-71 (2002).
59. F. Torrens,  
Fractal dimension of different structural-type zeolites and of the active sites,  
*Top. Catal.*, **18**, 291-297 (2002).
60. F. Torrens,  
A new tool for rational chiral-drug design: *N*-methyl barbiturates (NMB),  
*GIT Lab. J.*, **6**, 63-65 (2002).

61. F. Torrens,  
Computing the Kekulé structure count for alternant hydrocarbons,  
*Int. J. Quantum Chem.*, **88**, 392-397 (2002).
62. F. Torrens,  
Molecular polarizability of  $Sc_n$ ,  $C_n$  and endohedral  $Sc_n@C_m$  clusters,  
*Nanotechnology*, **13**, 433-438 (2002).
63. F. Torrens and V. Soria,  
Stationary-mobile phase distribution coefficient for polystyrene standards,  
*Sep. Sci. Technol.*, **37**, 1653-1665 (2002).
64. F. Torrens,  
Fractal dimension of zeolite catalysts,  
*Mol. Phys.*, **100**, 3105-3109 (2002).
65. F. Torrens,  
Calculation of organic solvent–water partition coefficients of iron–sulphur protein models,  
*Polyhedron*, **21**, 1357-1361 (2002).
66. F. Torrens,  
Computing the permanent of the adjacency matrix for fullerenes,  
*Internet Electron. J. Mol. Des.*, **1**, 351-359 (2002).
67. F. Torrens,  
Molecular polarizability of fullerenes and endohedral metallofullerenes,  
*J. Phys. Org. Chem.*, **15**, 742-749 (2002).
68. F. Torrens,  
Valence topological charge-transfer indices for dipole moments,  
*J. Mol. Struct. (THEOCHEM)*, **621**, 37-42 (2003).
69. F. Torrens,  
Valence topological charge-transfer indices for dipole moments,  
*Molecules*, **8**, 169-185 (2003).
70. F. Torrens,  
Characterizing cavity-like spaces in active-site models of zeolites,  
*Comput. Mater. Sci.*, **27**, 96-101 (2003).

71. F. Torrens,  
Principal component analysis of structural parameters for fullerenes,  
*Internet Electron. J. Mol. Des.*, **2**, 96-111 (2003).
72. F. Torrens,  
Nature of Fe<sup>III</sup>-O<sub>2</sub>, Fe<sup>II</sup>-CO and Fe<sup>III</sup>-CN complexes of hemoprotein models,  
*Polyhedron*, **22**, 1091-1098 (2003).
73. F. Torrens,  
A new chemical index inspired by biological plastic evolution,  
*Indian J. Chem., Sect. A*, **42**, 1258-1263 (2003).
74. F. Torrens,  
Principal component analysis of new structural parameters for fullerenes,  
*Internet Electron. J. Mol. Des.*, **2**, 546-563 (2003).
75. A. A. Toropov, O. M. Nabiev, P. Duchowicz, E. A. Castro and F. Torrens,  
QSPR modeling of hydrocarbon dipole moments by means of correlation weighting of local graph invariants,  
*J. Theor. Comput. Chem.*, **2**, 139-146 (2003).
76. F. Torrens,  
Effect of elliptical deformation on molecular polarizabilities of model carbon nanotubes from atomic increments,  
*J. Nanosci. Nanotech.*, **3**, 313-318 (2003).
77. F. Torrens,  
New structural parameters of fullerenes for principal component analysis,  
*Theor. Chem. Acc.*, **110**, 371-376 (2003).
78. F. Torrens,  
Structural, chemical topological, electrotopological and electronic structure hypotheses,  
*Comb. Chem. High Throughput Screen.*, **6**, 801-809 (2003).
79. F. Torrens, A. Campos and C. Abad,  
Binding of vinyl polymers to anionic model membranes,  
*Cell. Mol. Biol.*, **49**, 991-998 (2003).
80. F. Torrens  
Valence topological charge-transfer indices for dipole moments, in: *Mathematics and Computers in Biology and Chemistry*, Eds. N. Mastorakis, M. J. Er and C. D'Attelis,  
WSEAS, Athens, 2003, 6pp.

81. F. Torrens  
Fractal dimension of transdermal-delivery drug models, in: *Non-linear Analysis, Non-linear Systems and Chaos*, Eds. N. Mastorakis, M. J. Er and C. D'Attelis,  
WSEAS, Athens, 2003, 6pp.
82. F. Torrens,  
Molecular and atomic polarizabilities of model carbon nanotubes, in: *Processing and Properties of Structural Nanomaterials*, Eds. L. L. Shaw, C. Suryanarayana and R. S. Mishra,  
TMS, Warrendale (PA), 2003, pp. 35-42.
83. F. Torrens,  
A new tool for information retrieval in chemical education, in: *Information Technology: Coding and Computing*, Ed. E. Regentova,  
IEEE, Los Alamitos, 2003, 6 pp.
84. F. Torrens,  
Interdisciplinary study on water freezing, in: *Educação em Ciência na Escolaridade Básica*, Ed. M. P. Carvalho,  
Escola Superior de Educação de Viseu, Viseu, 2003, pp 1-9.
85. F. Torrens,  
A comparative study of O<sub>2</sub>, CO and CN binding to metalloporphyrins, in: *Synthetic Organic Chemistry VII*, Eds. J. A. Seijas, D.-C. Ji and S.-K. Lin,  
MDPI, Basel, 2003, pp. 1-12.
86. F. Torrens,  
Effect of elliptical deformation on molecular polarizabilities of model carbon nanotubes from atomic increments, in: *Fullerenes and Nanotubes: The Building Blocks of Next Generation Nanodevices*, Eds. Kamat, P. V., Guldi, D. M., and D'Souza, F., Fullerenes No. 13,  
The Electrochemical Society, Pennington (NJ), 2003, 383-389.
87. F. Torrens,  
Table of periodic properties of fullerenes based on structural parameters,  
*J. Chem. Inf. Comput. Sci.*, **44**, 60-67 (2004).
88. F. Torrens,  
Effect of type, size and deformation on polarizability of carbon nanotubes from atomic increments,  
*Nanotechnology*, **15**, S259-S264 (2004).
89. F. Torrens,  
Effect of size and deformation on polarizabilities of carbon nanotubes from atomic increments,  
*Future Generation Comput. Syst.*, **20**, 763-772 (2004).
90. F. Torrens,  
An improved force field for O<sub>2</sub>, CO and CN binding to metalloporphyrins,  
*J. Inclusion Phenom. Mol. Recognit. Chem.*, **49**, 37-46 (2004).

91. F. Torrens,  
A comparative study of O<sub>2</sub>, CO and CN binding to heme-IX protein models,  
*Molecules*, **9**, 632-649 (2004).
92. F. Torrens,  
Periodic table of carbon nanotubes based on the chiral vector,  
*Internet Electron. J. Mol. Des.*, **3**, 514-527 (2004).
93. F. Torrens,  
Nature of O<sub>2</sub>, CO, and CN binding to hemoprotein models,  
*Int. J. Quantum Chem.*, **99**, 963-971 (2004).
94. F. Torrens,  
Erratum: Nature of O<sub>2</sub>, CO, and CN binding to hemoprotein models,  
*Int. J. Quantum Chem.*, **99**, 981-981 (2004).
95. Y. Marrero Ponce, M. A. Cabrera Pérez, V. Romero Zaldivar, H. González Díaz and F. Torrens,  
A new topological descriptors based model for predicting intestinal epithelial transport of drugs in Caco-2 cell culture,  
*J. Pharm. Pharmaceut. Sci.*, **7**, 186-199 (2004).
96. Y. Marrero Ponce, H. González Díaz, V. Romero Zaldivar, F. Torrens and E. A. Castro,  
3D-Chiral quadratic indices of the *molecular pseudograph's atom adjacency matrix* and their application to central chirality codification: Classification of ACE inhibitors and prediction of  $\sigma$ -receptor antagonist activities,  
*Bioorg. Med. Chem.*, **12**, 5331-5342 (2004).
97. F. Torrens,  
A chemical index inspired by biological plastic evolution: Valence-isoelectronic series of aromatics,  
*J. Chem. Inf. Comput. Sci.*, **44**, 575-581 (2004).
98. E. A. Castro, F. Torrens, A. A. Toropov, I. V. Nesterov and O. M. Nabiev,  
QSAR modeling ANTI-HIV-1 activities by optimization of correlation weights of local graph invariants,  
*Mol. Simul.*, **30**, 691-696 (2004).
99. F. Torrens,  
Valence topological charge-transfer indices for dipole moments,  
*Mol. Divers.*, **8**, 365-370 (2004).
100. Y. Marrero Ponce, D. Nodarse, H. González Díaz, R. Ramos de Armas, V. Romero Zaldivar, F. Torrens and E. A. Castro,  
Nucleic acid quadratic indices of the *macromolecular graph's nucleotides adjacency matrix*. Modeling of footprints after the interaction of paromomycin with the HIV-1  $\Psi$ -RNA packaging region,  
*Int. J. Mol. Sci.*, **5**, 276-293 (2004).

101. F. Torrens,  
Table of periodic properties of fullerenes based on structural parameters,  
*J. Mol. Struct. (THEOCHEM)*, **709**, 135-142 (2004).
102. Y. Marrero Ponce, J. A. Castillo Garit, F. Torrens, V. Romero Zaldivar and E. A. Castro,  
Atom, atom-type, and total linear indices of the *molecular pseudograph's atom adjacency matrix*:  
Application to QSPR/QSAR of organic compounds,  
*Molecules*, **9**, 1100-1123 (2004).
103. Y. Marrero Ponce, R. Medina Marrero, E. A. Castro, R. Ramos de Armas, H. González Díaz, V.  
Romero Zaldivar and F. Torrens,  
Protein quadratic indices of the *macromolecular pseudograph's  $\alpha$ -carbon atom adjacency matrix*. 1.  
Prediction of Arc repressor alanine-mutant's stability,  
*Molecules*, **9**, 1124-1147 (2004).
104. F. Torrens,  
Valence topological charge-transfer indices for dipole moments: Percutaneous enhancers,  
*Molecules*, **9**, 1222-1235 (2004).
105. F. Torrens,  
Fractal dimension of transdermal-delivery drug models,  
*Leb. Sci. J.*, **5**(1), 61-70 (2004).
106. Y. Marrero-Ponce, J. A. Castillo-Garit, E. Olazabal, H. S. Serrano, A. Morales, N. Castañedo, F.  
Ibarra-Velarde, A. Huesca-Guillen, E. Jorge, A. del Valle, F. Torrens and E. A. Castro, TOMOCOMD-  
CARD, a novel approach for computer-aided *rational* drug design: I. Theoretical and experimental  
assessment of a promising method for computational screening and *in silico* design of new anthelmintic  
compounds,  
*J. Comput.-Aided Mol. Design*, **18**, 615-634 (2004).
107. F. Torrens,  
Molecular polarizability of Si/Ge/GaAs semiconductors clusters,  
*J. Comput. Methods Sci. Eng.*, **4**, 439-450 (2004).
108. F. Torrens,  
Calculation of partition coefficients of single-wall carbon nanotubes, in: *Lipophilicity III*, Ed. S. D.,  
Kramer,  
ETH, Zurich, 2004, 18 pp.
109. F. Torrens,  
Calculations on solvents and co-solvents of single-wall carbon nanotubes: *Cyclopyranoses*, in: *Synthetic  
Organic Chemistry VIII*, Eds. J. A. Seijas and M. P. Vázquez Tato,  
Universidad de Santiago de Compostela, Santiago de Compostela, 2004, pp. 1-14.
110. F. Torrens,  
Calculations on *cyclopyranoses* as co-solvents of single-wall carbon nanotubes,  
*Mol. Simul.*, **31**, 107-114 (2005).

111. F. Torrens,  
Periodic properties of carbon nanotubes based on the chiral vector,  
*Internet Electron. J. Mol. Des.*, **4**, 59-81 (2005).
112. Y. Marrero-Ponce, J. A. Castillo-Garit, E. Olazabal, H. S. Serrano, A. Morales, N. Castañedo, F. Ibarra-Velarde, A. Huesca-Guillen, A. M. Sánchez, F. Torrens and E. A. Castro,  
Atom, atom-type and total molecular linear indices as a promising approach for bioorganic and medicinal chemistry: Theoretical and experimental assessment of a novel method for virtual screening and rational design of new lead anthelmintic,  
*Bioorg. Med. Chem.*, **13**, 1005-1020 (2005).
113. Y. Marrero Ponce, M. A. Cabrera Pérez, V. Romero Zaldivar, M. Bermejo Sanz, D. Siverio Mota and F. Torrens,  
Prediction of intestinal epithelial transport of drug in (Caco-2) cell culture from molecular structure using *in silico* approaches during early drug discovery,  
*Internet Electron. J. Mol. Des.*, **4**, 124-150 (2005).
114. Y. Marrero-Ponce, R. Medina-Marrero, F. Torrens, Y. Martinez, V. Romero-Zaldivar and E. A. Castro,  
Atom, atom-type, and total nonstochastic and stochastic quadratic fingerprints: A promising approach for modeling of antibacterial activity,  
*Bioorg. Med. Chem.*, **13**, 2881-2899 (2005).
115. Y. Marrero-Ponce, R. Medina-Marrero, J. A. Castillo-Garit, V. Romero-Zaldivar, F. Torrens and E. A. Castro,  
Protein linear indices of the *macromolecular pseudograph  $\alpha$ -carbon atom adjacency matrix* in bioinformatics. Part 1: Prediction of protein stability effects of a complete set of alanine substitutions in Arc repressor,  
*Bioorg. Med. Chem.*, **13**, 3003-3015 (2005).
116. F. Torrens,  
Valence topological charge-transfer indices for reflecting polarity: Correction for heteromolecules,  
*Molecules*, **10**, 334-345 (2005).
117. F. Torrens, C. Abad, A. Codoñer, R. García-Lopera and A. Campos,  
Interaction of polyelectrolytes with oppositely charged micelles studied by fluorescence and liquid chromatography,  
*Eur. Polym. J.*, **41**, 1439-1452 (2005).
118. F. Torrens,  
Some calculations on single-wall carbon nanotubes,  
*Probl. Nonlin. Anal. Eng. Syst.*, **11**(2), 1-16 (2005).
119. F. Torrens,  
Calculations on solvents and co-solvents of single-wall carbon nanotubes: *Cyclopyranoses*,  
*Nanotechnology*, **16**, S181-S189 (2005).
120. F. Torrens,  
Calculations on solvents and co-solvents of single-wall carbon nanotubes: *Cyclopyranoses*,  
*J. Mol. Struct. (THEOCHEM)*, **757**, 183-191 (2005).

121. Y. Marrero-Ponce, Y. Machado-Tugores, D. Montero Pereira, J. A. Escario, A. Gómez Barrio, J. J. Nogal-Ruiz, C. Ochoa, V. J. Arán, A. R. Martínez-Fernández, R. N. García Sánchez, A. Montero-Torres, F. Torrens and A. Meneses-Marcel,  
A computer-based approach to the rational discovery of new trichomonacidal drugs by atom-type linear indices,  
*Curr. Drug Discov. Technol.*, **2**, 245-265 (2005).
122. F. Torrens and G. Castellano,  
Cluster origin of the solubility of single-wall carbon nanotubes,  
*Comput. Lett.*, **1**, 331-336 (2005).
123. F. Torrens, Partition of solvents and co-solvents of nanotubes: Proteins and *cyclopyranoses*, in: *Frontiers in Drug Design and Discovery I*, Eds. G. W. Caldwell, Atta-ur-Rahman and B. A. Springer, Bentham, Hilversum (Holland), 2005, 231-266.
124. F. Torrens,  
Resonance in an interacting induced-dipole polarization model, in: *Computational Methods in Sciences and Engineering*, Ed. T. E. Simos, Lecture Series on Computer and Computational Sciences No. 3, Brill Academic, Leiden, 2005, 1-2.
125. F. Torrens,  
Calculations on solvents and co-solvents of carbon nanotubes: *Cyclopyranoses*, in: *Functional Nanomaterials*, Eds. K. E. Geckeler and E. Rosenberg, American Scientific, Stevenson Ranch (CA), 2005, ch. 6, pp. 1-13.
126. F. Torrens,  
Calculations on solvents and co-solvents of single-wall carbon nanotubes: *Cyclopyranoses*, in: *Nanoscale Devices, Materials, and Biological Systems: Fundamental and Applications*, Eds. M. Cahay, M. Urquidi-Macdonald, S. Bandyopadhyay, P. Guo, H. Hasegawa, N. Koshida, J. P. Leburton, D. J. Lockwood, S. Seal and A. Stella, The Electrochemical Society, Pennington (NJ), 2005, 439-458.
127. F. Torrens and G. Castellano,  
Periodic table of local anaesthetics (procaine analogues), in: *Synthetic Organic Chemistry IX*, Eds. J. A. Seijas and M. P. Vázquez Tato, MDPI, Basel (Switzerland), 2005, pp. 1-18.
128. Y. Marrero Ponce and F. Torrens,  
Novel 2D TOMOCOMD-CARDD descriptors: Atom-based stochastic and non-stochastic bilinear indices and their QSPR applications, in: *Synthetic Organic Chemistry IX*, Eds. J. A. Seijas and M. P. Vázquez Tato, MDPI, Basel (Switzerland), 2005, pp. 1-22.
129. Y. Marrero Ponce and F. Torrens,  
Bond, bond-type, and total linear indices of the non-stochastic and stochastic edge adjacency matrix. 1. Theory and QSPR Studies, in: *Synthetic Organic Chemistry IX*, Eds. J. A. Seijas and M. P. Vázquez Tato, MDPI, Basel (Switzerland), 2005, pp. 1-21.
130. G. M. Casañola-Martín, M. T. H. Khan, Y. Marrero-Ponce, A. Ather, M. N. Sultankhodzhaev and F. Torrens,  
New tyrosinase inhibitors selected by atomic linear indices-based classification models,  
*Bioorg. Med. Chem. Lett.*, **16**, 324-330 (2006).

131. F. Torrens and G. Castellano,  
Periodic classification of local anaesthetics (procaine analogues),  
*Int. J. Mol. Sci.*, **7**, 12-34 (2006).
132. F. Torrens,  
Calculations of organic-solvent dispersions of single-wall carbon nanotubes,  
*Int. J. Quantum Chem.*, **106**, 712-718 (2006).
133. F. Torrens,  
Corrigendum: Effect of type, size and deformation on polarizability of carbon nanotubes from atomic increments,  
*Nanotechnology*, **17**, 1541-1541 (2006).
134. Y. Marrero-Ponce, R. Medina Marrero, F. Torrens, Y. Martinez, M. García Bernal, V. Romero Zaldivar, E. A. Castro and R. Grau Abalo,  
Non-stochastic and stochastic linear indices of the molecular pseudograph's atom-adjacency matrix: A novel approach for computational *in silico* screening and *rational* selection of new lead antibacterial agents,  
*J. Mol. Model.*, **12**, 255-271 (2006).
135. A. Montero-Torres, R. N. García-Sánchez, Y. Marrero-Ponce, Y. Machado-Tugores, J. J. Nogal-Ruiz, A. R. Martínez-Fernández, V. J. Arán, C. Ochoa, A. Meneses-Marcel and F. Torrens,  
Non-stochastic quadratic fingerprints and LDA-based QSAR models in hit and lead generation through virtual screening: Theoretical and experimental assessment of a promising method for the discovery of new antimalarial compounds,  
*Eur. J. Med. Chem.*, **41**, 483-493 (2006).
136. J. A. Castillo-Garit, Y. Marrero-Ponce and F. Torrens,  
Atom-based 3D-chiral quadratic indices. Part 2: Prediction of the corticosteroid-binding globulin binding affinity of the 31 benchmark steroids data set,  
*Bioorg. Med. Chem.*, **14**, 2398-2408 (2006).
137. F. Torrens and G. Castellano,  
Fractal dimension of active-site models of zeolite catalysts,  
*J. Nanomater.*, 1-9 (2006).
138. Y. Marrero-Ponce, A. Meneses-Marcel, J. A. Castillo-Garit, Y. Machado-Tugores, J. A. Escario, A. Gómez Barrio, D. Montero Pereira, J. J. Nogal-Ruiz, V. J. Arán, A. R. Martínez-Fernández, F. Torrens, R. Rotondo, F. Ibarra-Velarde and Y. J. Alvarado,  
Predicting antitrichomonal activity: A computational screening using atom-based bilinear indices and experimental proofs,  
*Bioorg. Med. Chem.*, **14**, 6502-6524 (2006).
139. F. Torrens, V. Soria, A. Codoñer, C. Abad and A. Campos,  
Compatibility between polystyrene copolymers and polymers in solution *via* hydrogen bonding,  
*Eur. Polym. J.*, **42**, 2807-2823 (2006).
140. Y. M. Álvarez-Ginarte, R. Crespo-Otero, Y. Marrero-Ponce, L. A. Montero, J. A. Ruiz-García, A. Padrón-García and F. Torrens-Zaragoza,  
Quantitative structure-activity relationship of the 4,5 $\alpha$ -dihydrotestosterone steroid family,  
*QSAR Comb. Sci.*, **25**, 881-894 (2006).

141. Y. Marrero-Ponce, F. Torrens, Y. J. Alvarado and R. Rotondo, Bond-based global and local (bond, group and bond-type) quadratic indices and their applications to computer-aided molecular design. 1. QSPR studies of diverse sets of organic chemicals, *J. Comput.-Aided Mol. Design*, **20**, 685-701 (2006).
142. F. Torrens, V. Soria, I. S. Monzó, C. Abad and A. Campos, Treatment of poly(styrene-co-methacrylic acid)/poly(4-vinylpyridine) blends in solution under liquid-liquid phase-separation conditions. A new method for phase-separation data attainment from viscosity measurements, *J. Appl. Polym. Sci.*, **102**, 5039-5049 (2006).
143. F. Torrens and G. Castellano, Peptide potential energy surfaces and protein folding, *J. Argent. Chem. Soc.*, **94**(1-3), 27-47 (2006).
144. M. C. Vega, A. Montero-Torres, Y. Marrero-Ponce, M. Rolón, A. Gómez-Barrio, J. A. Escario, V. J. Arán, J. J. Nogal, A. Meneses-Marcel and F. Torrens, New ligand-based approach for the discovery of antitrypanosomal compounds, *Bioorg. Med. Chem. Lett.*, **16**, 1898-1904 (2006).
145. F. Torrens, Molecular polarizability of Si/Ge/GaAs semiconductors clusters, in: *Computational Aspects of Electric Polarizability Calculations: Atoms, Molecules and Clusters*, Ed. G. Maroulis, IOS, Amsterdam, 2006, pp. 205-216.
146. F. Torrens and G. Castellano, Cluster origin of the solubility of single-wall carbon nanotubes, in: *Structures and Properties of Clusters: From a few Atoms to Nanoparticles*, Ed. G. Maroulis, Lecture Series on Computer and Computational Sciences No. 5, VSP Brill, Leiden, 2006, pp. 187-192.
147. F. Torrens and G. Castellano, Effect of packing on cluster solvation of nanotubes, in: *Nanotechnology VI*, Eds. S. Bandyopadhyay and M. Cahay, Institute of Electrical and Electronics Engineers, Piscataway (NJ), 2006, pp. 1-4.
148. F. Torrens and G. Castellano, Negatively cooperative binding of melittin to neutral phospholipid vesicles, in: *Synthetic Organic Chemistry X*, Eds. J. A. Seijas and M. P. Vázquez Tato, MDPI, Basel (Switzerland), 2006, pp. 1-27.
149. F. Torrens and G. Castellano, Polarizability characterization of zeolitic Brønsted acidic sites, in: *Synthetic Organic Chemistry X*, Eds. J. A. Seijas and M. P. Vázquez Tato, MDPI, Basel (Switzerland), 2006, pp. 1-22.
150. Y. Marrero-Ponce, A. Meneses-Marcel, O. M. Rivera-Borroto, A. Montero, J. A. Escario, A. Gómez Barrio, D. Montero Pereira, J. J. Nogal, R. Grau, F. Torrens, F. Ibarra-Velarde, R. Rotondo, Y. J. Alvarado, C. Vogel and L. Rodríguez-Machin, Quick access to potential trichomonacids through bond linear indices – Trained ligand-based virtual screening models, in: *Synthetic Organic Chemistry X*, Eds. J. A. Seijas and M. P. Vázquez Tato, MDPI, Basel (Switzerland), 2006, pp. 1-41.

151. A. Meneses-Marcel, O. M. Rivera-Borroto, Y. Marrero-Ponce, A. Montero, Y. Machado Tugores, J. A. Escario, A. Gómez Barrio, D. Montero Pereira, J. J. Nogal, V. V. Kouznetsov, C. Ochoa Puentes, A. R. Bohórquez, R. Grau, N. Castañedo Cancio, F. Torrens, F. Ibarra-Velarde, R. Rotondo, Y. J. Alvarado, C. Vogel and L. Rodriguez-Machin, Bond-based quadratic TOMOCOMD-CARDD molecular indices and statistical techniques for new antitrichomonal drug-like compounds discovery, in: *Synthetic Organic Chemistry X*, Eds. J. A. Seijas and M. P. Vázquez Tato, MDPI, Basel (Switzerland), 2006, pp. 1-53.
152. J. A. Castillo-Garit, Y. Marrero-Ponce, R. Medina-Marrero, V. Romero-Zaldivar, F. Torrens and E. A. Castro, Protein linear indices in bioinformatics studies: 1. Prediction of protein stability effects of a complete set of alanine substitutions in Arc repressor, in: *Synthetic Organic Chemistry X*, Eds. J. A. Seijas and M. P. Vázquez Tato, MDPI, Basel (Switzerland), 2006, pp. 1-26.
153. J. A. Castillo-Garit, Y. Marrero-Ponce, F. Torrens and R. Rotondo, Atom-based stochastic and non-stochastic 3D-chiral bilinear indices and their applications to central chirality codification, in: *Synthetic Organic Chemistry X*, Eds. J. A. Seijas and M. P. Vázquez Tato, MDPI, Basel (Switzerland), 2006, pp. 1-36.
154. G. M. Casañola-Martín, Y. Marrero-Ponce, M. T. H. Khan, A. Ather, M. N. Sultankhodzhaev and F. Torrens, *In silico* discovery of novel tyrosinase inhibitors using atom based linear indices, in: *Synthetic Organic Chemistry X*, Eds. J. A. Seijas and M. P. Vázquez Tato, MDPI, Basel (Switzerland), 2006, pp. 1-12.
155. G. M. Casañola-Martín, Y. Marrero-Ponce, M. T. H. Khan, A. Ather, K. M. Khan, F. Torrens and R. Rotondo, The Dragon method in the computational identification of novel tyrosinase inhibitors. Results supported by experimental assays, in: *Synthetic Organic Chemistry X*, Eds. J. A. Seijas and M. P. Vázquez Tato, MDPI, Basel (Switzerland), 2006, pp. 1-25.
156. F. Torrens and G. Castellano, Polarizability of zeolitic Brønsted acidic sites, in: *Computational and Mathematical Methods in Science and Engineering VI*, Eds. R. Criado and D. Estep, Universidad Rey Juan Carlos, Madrid (Spain), 2006, pp. 1-8.
157. F. Torrens and G. Castellano, Cluster nature of the solvation features of single-wall carbon nanotubes, in: *Focus on Nanotube Research*, Ed. D. A. Martín, Nova, New York (NY), 2006, pp. 37-65.
158. G. M. Casañola-Martín, Y. Marrero-Ponce, M. T. H. Khan, A. Ather, S. Sultan, F. Torrens and R. Rotondo, TOMOCOMD-CARDD descriptors-based virtual screening of tyrosinase inhibitors: Evaluation of different classification model combinations using bond-based linear indices, *Bioorg. Med. Chem.*, **15**, 1483-1503 (2007).
159. F. Torrens, G. Castellano, A. Campos and C. Abad, Negatively cooperative binding of melittin to neutral phospholipid vesicles, *J. Mol. Struct.*, **834-836**, 216-228 (2007).
160. Y. Marrero Ponce, M. T. H. Khan, G. M. Casañola Martín, A. Ather, M. N. Sultankhodzhaev, F. Torrens, R. Rotondo and Y. J. Alvarado, Atom-based 2D quadratic indices in drug discovery of novel tyrosinase inhibitors: Results of *in silico* studies supported by experimental results, *QSAR Comb. Sci.*, **26**, 469-487 (2007).

161. F. Torrens and G. Castellano,  
Cluster origin of the transfer phenomena of single-wall carbon nanotubes,  
*J. Comput. Theor. Nanosci.*, **4**, 588-603 (2007).
162. Y. Marrero-Ponce, M. T. H. Khan, G. M. Casañola-Martín, A. Ather, M. N. Sultankhodzhaev, R. García-Domenech, F. Torrens and R. Rotondo,  
Bond-based 2D TOMOCOMD-CARDD approach for drug discovery: Aiding decision-making in *in silico* selection of new lead tyrosinase inhibitors,  
*J. Comput.-Aided Mol. Design*, **21**, 167-188 (2007).
163. Y. Marrero-Ponce, M. T. H. Khan, G. M. Casañola Martín, A. Ather, M. N. Sultankhodzhaev, F. Torrens and R. Rotondo,  
Prediction of tyrosinase inhibition activity using novel atom-based bilinear indices,  
*ChemMedChem*, **2**, 449-478 (2007).
164. F. Torrens and G. Castellano,  
Net charge and polarizability of zeolitic Brønsted acidic sites,  
*Int. J. Quantum Chem.*, **107**, 2378-2383 (2007).
165. J. A. Castillo-Garrit, Y. Marrero-Ponce, F. Torrens and R. Rotondo,  
Atom-based stochastic and non-stochastic 3D-chiral bilinear indices and their applications to central chirality codification,  
*J. Mol. Graphics Model.*, **26**, 32-47 (2007).
166. G. M. Casañola-Martín, Y. Marrero-Ponce, M. T. H. Khan, A. Ather, K. M. Khan, F. Torrens and R. Rotondo,  
Dragon method for finding novel tyrosinase inhibitors: *Biosilico* identification and experimental *in vitro* assays,  
*Eur. J. Med. Chem.*, **42**, 1370-1381 (2007).
167. F. Torrens and G. Castellano,  
Effect of packing on the cluster nature of C nanotubes: An information entropy analysis,  
*Microelectron. J.*, **38**, 1109-1122 (2007).
168. F. Torrens and G. Castellano,  
Cluster nature of the solvation features of single-wall carbon nanotubes,  
*Curr. Res. Nanotech.*, **1**, 1-29 (2007).
169. F. Torrens and G. Castellano,  
Asymptotic analysis of coagulation–fragmentation equations of carbon nanotube clusters,  
*Nanoscale Res. Lett.*, **2**, 337-349 (2007).
170. F. Torrens and G. Castellano,  
Editorial,  
*Meet. Sci. Technol. Educ. Gend.*, **1**, [editor01]–1-1 (2007).

171. F. Torrens and G. Castellano,  
Propuesta de una revista de divulgación científico-tecnológica y de género,  
*Meet. Sci. Technol. Educ. Gend.*, **1**, [torren01]–1-10 (2007).
172. F. Torrens and G. Castellano,  
Plan de gestión de recursos en un grupo de divulgación de la ciencia,  
*Meet. Sci. Technol. Educ. Gend.*, **1**, [torren02]–1-2 (2007).
173. F. Torrens and G. Castellano,  
Resultados de un estudio nacional sobre la acreditación de profesores funcionarios,  
*Meet. Sci. Technol. Educ. Gend.*, **1**, [torren03]–1-2 (2007).
174. F. Torrens and G. Castellano,  
*Encuentros en la Ciencia, la Tecnología, la Educación y el Género no es gratis*,  
*Meet. Sci. Technol. Educ. Gend.*, **1**, [torren04]–1-1 (2007).
175. F. Torrens and G. Castellano,  
Aplicación con éxito de las nuevas tecnologías al proceso formativo,  
*Meet. Sci. Technol. Educ. Gend.*, **1**, [torren05]–1-1 (2007).
176. F. Torrens and G. Castellano,  
Papel del AZT en el origen del síndrome de inmunodeficiencia adquirida,  
*Meet. Sci. Technol. Educ. Gend.*, **1**, [torren06]–1-2 (2007).
177. F. Torrens and G. Castellano,  
Nutrición básica humana,  
*Meet. Sci. Technol. Educ. Gend.*, **1**, [torren07]–1-3 (2007).
178. F. Torrens and G. Castellano,  
Diferencias de género en tricomoniosis humana,  
*Meet. Sci. Technol. Educ. Gend.*, **1**, [torren08]–1-8 (2007).
179. F. Torrens and G. Castellano,  
Diferencias de género en hormonas sexuales esteroidales y sus receptores,  
*Meet. Sci. Technol. Educ. Gend.*, **1**, [torren09]–1-4 (2007).
180. F. Torrens and G. Castellano,  
Diferencias de género en inhibidores del virus de inmunodeficiencia humana,  
*Meet. Sci. Technol. Educ. Gend.*, **1**, [torren10]–1-5 (2007).

181. F. Torrens and G. Castellano,  
MiARNs reescriben las reglas de la Biología Molecular,  
*Meet. Sci. Technol. Educ. Gend.*, **1**, [torren11]–1-5 (2007).
182. F. Torrens and G. Castellano,  
Reseña de la *I Setmana del Medi AMBIENT i la SOS*tenibilitat,  
*Meet. Sci. Technol. Educ. Gend.*, **1**, [torren12]–1-5 (2007).
183. F. Torrens and G. Castellano,  
Plan estratégico y excelencia comercial: Aplicación en educación,  
*Meet. Sci. Technol. Educ. Gend.*, **1**, [torren13]–1-4 (2007).
184. F. Torrens and G. Castellano,  
Sirenas y valores,  
*Meet. Sci. Technol. Educ. Gend.*, **1**, [torren14]–1-11 (2007).
185. F. Torrens and G. Castellano,  
Periodic classification of human immunodeficiency virus inhibitors, in: *Synthetic Organic Chemistry XI*, Eds. J. A. Seijas and M. P. Vázquez Tato,  
MDPI, Basel (Switzerland), 2007, pp. 1-10.
186. F. Torrens and G. Castellano,  
Correction of charge-transfer indices for multifunctional amino acids: Application to lysozyme, in:  
*Synthetic Organic Chemistry XI*, Eds. J. A. Seijas and M. P. Vázquez Tato,  
MDPI, Basel (Switzerland), 2007, pp. 1-16.
187. F. Torrens and G. Castellano,  
Calculation of partition coefficients of Fe–S/Se protein models, in: *Synthetic Organic Chemistry XI*,  
Eds. J. A. Seijas and M. P. Vázquez Tato,  
MDPI, Basel (Switzerland), 2007, pp. 1-14.
188. F. Torrens and G. Castellano,  
Information entropy and the classification of local anaesthetics, in: *Synthetic Organic Chemistry XI*,  
Eds. J. A. Seijas and M. P. Vázquez Tato,  
MDPI, Basel (Switzerland), 2007, pp. 1-17.
189. J. A. Castillo-Garit, Y. Marrero-Ponce, F. Torrens and R. García-Domenech,  
Estimation of ADME properties in drug discovery: Predicting Caco-2 cell permeability using atom- based  
stochastic and non-stochastic linear indices, in: *Synthetic Organic Chemistry XI*, Eds. J. A. Seijas and M.  
P. Vázquez Tato,  
MDPI, Basel (Switzerland), 2007, pp. 1-40.
190. Y. M. Álvarez-Ginarte, Y. Marrero-Ponce, J. A. Ruiz-García, L. A. Montero-Cabrera, J. M. García  
de la Vega, P. Noheda-Marín, R. Crespo-Otero. F. Torrens-Zaragozá and R. García-Domenech,  
Applying pattern recognition methods plus quantum and physico-chemical molecular descriptors to  
analyze the anabolic activity of structurally diverse steroids,  
*J. Comput. Chem.*, **29**, 317-333 (2008).

191. F. Torrens, L. Solar, V. Puchol, J. Latorre, C. Abad and A. Campos, Incorporation of silica nanospherical particles into epoxy-amine cross-linked materials, *Polym. Polym. Compos.*, **16**, 139-152 (2008).
192. J. A. Castillo-Garit, Y. Marrero-Ponce, F. Torrens and R. García-Domenech, Estimation of ADME properties in drug discovery: Predicting Caco-2 cell permeability using atom-based stochastic and non-stochastic linear indices, *J. Pharm. Sci.*, **97**, 1946-1976 (2008).
193. Y. Marrero-Ponce, A. Meneses-Marcel, O. M. Rivera-Borroto, R. García-Domenech, J. V. de Julián-Ortiz, A. Montero, J. A. Escario, A. Gómez Barrio, D. Montero Pereira, J. J. Nogal, R. Grau, F. Torrens, C. Vogel and V. J. Arán, Bond-based linear indices in QSAR: Computational discovery of novel anti-trichomonal compounds, *J. Comput.-Aided Mol. Design*, **22**, 523-540 (2008).
194. J. A. Castillo-Garit, Y. Marrero-Ponce, J. Escobar, F. Torrens and R. Rotondo, A novel approach to predict aquatic toxicity from molecular structure, *Chemosphere*, **73**, 415-427 (2008).
195. J. A. Castillo-Garit, O. Martínez-Santiago, Y. Marrero-Ponce, G. M. Casañola-Martín and F. Torrens, Atom-based non-stochastic and stochastic bilinear indices: Application to QSPR/QSAR studies of organic compounds, *Chem. Phys. Lett.*, **464**, 107-112 (2008).
196. F. Torrens, C. M. Gómez, L. M. León, C. Abad and A. Campos, Modelling studies of the phase behaviour of monomer/polymer/disk composites, *Macromol. Theory Simul.*, **17**, 325-340 (2008).
197. J. A. Castillo-Garit, Y. Marrero-Ponce, F. Torrens, R. García-Domenech and V. Romero Zaldivar, Bond-based 3D-chiral linear indices: Theory and QSAR applications to central chirality codification, *J. Comput. Chem.*, **29**, 2500-2512 (2008).
198. Y. Marrero-Ponce, F. Torrens, R. García-Domenech, S. E. Ortega-Broche and V. Romero Zaldivar, Novel 2D TOMOCOMD-CARDD molecular descriptors: Atom-based stochastic and non-stochastic bilinear indices and their QSPR applications, *J. Math. Chem.*, **44**, 650-673 (2008).
199. Y. Marrero-Ponce, J. A. Castillo-Garit, E. A. Castro, F. Torrens and R. Rotondo, 3D-chiral (2.5) atom-based TOMOCOMD-CARDD descriptors: Theory and QSAR applications to central chirality codification, *J. Math. Chem.*, **44**, 755-786 (2008).
200. A. Meneses-Marcel, O. M. Rivera-Borroto, Y. Marrero-Ponce, A. Montero, Y. Machado Tugores, J. A. Escario, A. Gómez Barrio, D. Montero Periera, J. J. Nogal, V. V. Kouznetsov, C. Ochoa Puentes, A. R. Bohórquez, R. Grau, F. Torrens, F. Ibarra-Velarde and V. J. Arán, New antitrichomonal drug-like chemicals selected by bond (edge)-based TOMOCOMD-CARDD descriptors, *J. Biomol. Screen.*, **13**, 785-794 (2008).

201. F. Torrens, I. S. Monzó, C. M. Gómez-Clarí, C. Abad and A. Campos, Study and comparison of interaction parameters and phase behaviour of epoxy/polystyrene and epoxies copolymer polystyrene-*b*-poly(methyl methacrylate) blends, *Polym. Compos.*, **29**, 1337-1345 (2008).
202. F. Torrens and G. Castellano, Improvement of charge-transfer indices for multifunctional amino acids: Application to lysozyme, *SAR QSAR Environ. Res.*, **19**, 643-654 (2008).
203. F. Torrens and G. Castellano, Fractal dimension of transdermal-delivery drug models: 4-Alkylanilines, *J. Liq. Chromatogr. Relat. Technol.*, **31**, 2337-2347 (2008).
204. F. Torrens and G. Castellano, Properties of fullerite and other symmetric carbon forms: Similarity laws, *Symmetry Cult. Sci.* **19**, 341-370 (2008).
205. F. Torrens and G. Castellano, Properties of fullerenes and other polyhedral cages: Isoperimetric quotient, *Symmetry Cult. Sci.* **19**, 371-383 (2008).
206. F. Torrens and G. Castellano, Nuevo diseño y aproximaciones no ortodoxas con nanotubos de carbono, in: *Sensors: A Local Approach*, Eds. E. García Breijo, L. Gil Sánchez, Á. Maquieira Catalá, M. D. Marcos Martínez, R. Martínez Máñez, R. Puchades Pla, J. V. Ros Lis, F. Sancenón Galarza and J. Soto Camino, Universidad Politécnica de Valencia, València, 2008, Vol. 1, ch. 52, pp. 409-415.
207. F. Torrens and G. Castellano, Resonance in interacting induced-dipole polarizing force-field derivatives, in: *Computational and Mathematical Methods in Science and Engineering VIII*, Ed., J. Vigo-Aguilar, Universidad de Salamanca, Salamanca (Spain), 2008, pp. 643-646.
208. F. Torrens and G. Castellano, A new tool for interrogation of macromolecular structure in chemical education, in: *Synthetic Organic Chemistry XII*, Eds. J. A. Seijas and M. P. Vázquez Tato, MDPI, Basel (Switzerland), 2008, pp. 1-17.
209. R. Medina Marrero, Y. Marrero-Ponce, Y. Echeverría Díaz, G. M. Casañola-Martín, M. García Bernal, F. Torrens and F. Pérez Giménez, TOMOCOMD-CARDD method in early drug discovery-based rational drug selection of antifungal agents. A comparative study, in: *Synthetic Organic Chemistry XII*, Eds. J. A. Seijas and M. P. Vázquez Tato, MDPI, Basel (Switzerland), 2008, pp. 1-27.
210. J. A. Castillo-Garit, Y. Marrero-Ponce, F. Torrens and R. García-Domenech, Bond-based 3D-chiral linear indices: Theory and QSAR applications to central chirality codification, in: *Synthetic Organic Chemistry XII*, Eds. J. A. Seijas and M. P. Vázquez Tato, MDPI, Basel (Switzerland), 2008, pp. 1-25.

211. Y. Marrero-Ponce, G. M. Casañola-Martín, M. T. H. Khan, A. Ather, K. M. Khan, V. Romero Zaldivar, F. Torrens, R. Rotondo and F. Pérez-Giménez, Bond-based 2D quadratic fingerprints in QSAR studies. Virtual and *in vitro* tyrosinase inhibitory activity elucidation, in: *Synthetic Organic Chemistry XII*, Eds. J. A. Seijas and M. P. Vázquez Tato, MDPI, Basel (Switzerland), 2008, pp. 1-36.
212. Y. Marrero-Ponce, S. E. Ortega-Broche, Y. Echeverría Díaz, Y. J. Alvarado, N. Cubillan, R. Grau, F. Torrens and F. Pérez-Giménez, Nucleotide's bilinear indices: Novel bio-macromolecular descriptors for bioinformatics studies of nucleic acids. I. Prediction of paromomycin's affinity constant with HIV-1  $\Psi$ -RNA packaging region, in: *Synthetic Organic Chemistry XII*, Eds. J. A. Seijas and M. P. Vázquez Tato, MDPI, Basel (Switzerland), 2008, pp. 1-50.
213. Y. Marrero Ponce, S. E. Ortega-Broche, Y. Echeverría Díaz, F. Torrens and F. Pérez-Giménez, TOMOCOMD-CAMPS and protein bilinear indices: Novel bio-macromolecular descriptors for protein research. I. Predicting protein stability effects of a complete set of alanine substitutions in Arc repressor, in: *Synthetic Organic Chemistry XII*, Eds. J. A. Seijas and M. P. Vázquez Tato, MDPI, Basel (Switzerland), 2008, pp. 1-55.
214. F. Torrens and G. Castellano, High-performance size-exclusion chromatography as a technique for characterizing the interaction between polyanions and cationic liposomes, in: *Ingeniería de Materiales Biopoliméricos I*, Ed. J. Cortés, Fundación para la Educación Superior Internacional, Xalapa (Veracruz), 2008, pp. 1-14.
215. F. Torrens and G. Castellano, Phylogenesis by information entropy: Avian birds and 1918 influenza virus, in: *Modelling & Simulation*, Eds. S. Turner and J. Yunus, IEEE, London, 2008, Vol. 2, pp. 1-2.
216. O. M. Rivera-Borroto, Y. Marrero-Ponce, A. Meneses-Marcel, J. A. Escario, A. Gómez Barrio, V. J. Arán, M. A. Martins Alho, D. Montero Pereira, J. J. Nogal, F. Torrens, F. Ibarra-Velarde, Y. Vera Montenegro, A. Huesca-Guillén, N. Rivera and C. Vogel, Discovery of novel trichomonacids using LDA-driven QSAR models and bond-based bilinear indices as molecular descriptors, *QSAR Comb. Sci.*, **28**, 9-26 (2009).
217. J. A. Castillo-Garit, Y. Marrero-Ponce, F. Torrens, R. García-Domenech and J. E. Rodríguez-Borges, Applications of bond-based 3D-chiral quadratic indices in QSAR studies related to central chirality codification, *QSAR Comb. Sci.*, **28**, 1465-1477 (2009).
218. F. Torrens and G. Castellano, Resonance in interacting induced-dipole polarizing force fields: Application to force-field derivatives, *Algorithms*, **2**, 437-447 (2009).
219. F. Torrens, G. Castellano, A. Campos and C. Abad, Binding of water-soluble, globular proteins to anionic model membranes, *J. Mol. Struct.*, **924-926**, 274-284 (2009).
220. Y. Marrero-Ponce, S. E. Ortega-Broche, Y. Echeverría Díaz, Y. J. Alvarado, N. Cubillan, G. Casas Cardoso, F. Torrens and F. Pérez-Giménez, Nucleotide's bilinear indices: Novel bio-macromolecular descriptors for bioinformatics studies of nucleic acids. I. Prediction of paromomycin's affinity constant with HIV-1  $\Psi$ -RNA packaging region, *J. Theor. Biol.*, **259**, 229-241 (2009).

221. L. M. León, M. Laza, V. Puchol, F. Torrens, C. Abad and A. Campos, Dynamic mechanical measurements of epoxy matrix-silica nanocomposites II, *Polym. Polym. Compos.*, **17**, 313-324 (2009).
222. F. Torrens and G. Castellano, Comparative analysis of the electrostatics of the binding of cationic proteins to vesicles: Asymmetric location of anionic phospholipids, *Anal. Chim. Acta*, **654**, 2-10 (2009).
223. L. M. León, M. Laza, F. Torrens, V. Puchol, C. Abad and A. Campos, Incorporation of silica nanospherical particles in epoxy-amine crosslinked materials II. Dynamic mechanical measurements of epoxy matrix-silica nanocomposites, *Polym. Polym. Compos.*, **17**, 457-465 (2009).
224. F. Torrens and G. Castellano, Topological charge-transfer indices: From small molecules to proteins, *Curr. Proteomics*, **6**, 204-213 (2009).
225. F. Torrens and G. Castellano, Modelling of complex multicellular systems: Tumour-immune cells competition, *Chem. Central J.*, **3**(Suppl. I), 75-1-1 (2009).
226. G. Castellano Estornell and F. Torrens Zaragoza, Local anaesthetics classified using chemical structural indicators, *Nereis*, (2) 7-17 (2009).
227. F. Torrens and G. Castellano, Periodic classification of human immunodeficiency virus inhibitors, in: *Biomedical Data and Applications*, Eds. A. S. Sidhu, T. Dillon and M. Bellgard, Stud. Comput. Intelligence No. 224, Springer, Berlin, 2009, pp. 1-65.
228. F. Torrens and G. Castellano, Classification of complex molecules, in: *Foundations of Computational Intelligence Vol. 5*, Eds. A.-E. Hassanien and A. Abraham, Stud. Comput. Intelligence No. 205, Springer, Berlin, 2009, pp. 243-315.
229. F. Torrens and G. Castellano, Asymptotic analysis of coagulation-fragmentation equations, in: *Carbon Nanotubes: New Research*, Ed., A. P. Ottenhouse, Nova, New York (NY), 2009, pp. 7-16.
230. F. Torrens and G. Castellano, Classification of human immunodeficiency virus inhibitors, in: *Health Informatics VII*, Ed., A. Delgado-Ramos, Dirección Nacional de Informática en Salud, Havana (Cuba), 2009, pp. 1-10.

231. F. Torrens and G. Castellano,  
Cluster nature of the solvent features of C nanohorns, in: *Minerals, Metals and Materials CXXXVIII*, TMS, Warrendale (PA), 2009, pp. 1-8.
232. F. Torrens and G. Castellano,  
Modo simple de construir un sensor óptico de acidez, in: *Sensors*, Eds. A. M. Costero Nieto, S. Gil Grau and M. Parra Álvarez,  
Universitat de València, València (Spain), 2009, Vol. 2., ch. 45, pp. 207-215.
233. F. Torrens and G. Castellano,  
Protein binding to vesicles: Asymmetric location of phospholipids, in: *Topics in Chemistry & Materials Science III*, Eds. R. D. Nikolova and G. N. Vayssilov,  
Heron, Sofia (Bulgaria), 2009, pp. 72-82.
234. F. Torrens and G. Castellano,  
Cluster nature of C-nanohorn solvent features, in: *Physics, Chemistry and Application of Nanostructures*, Eds. V. E. Borisenko, S. V. Gaponenko and V. S. Gurin,  
World Scientific, Singapore (Republic of Singapore), 2009, pp. 112-115.
235. F. Torrens and G. Castellano,  
In-silico drug design and the molecular classification of local anaesthetics, in: *Bioinformatics Italian Society VI*, Eds. D. Bordo, F. Masulli, M. Muselli and P. Romano,  
Società di Bioinformatica Italiana, Bari (Italy), 2009, pp. 1-2.
236. F. Torrens and G. Castellano,  
Riesgo de proliferación en el ciclo de combustible nuclear, in: *Ingeniería de Residuos II*, Eds. N. Molinares, A. Escudero, N. Logreira A. Sisa and M. A. Isaacs,  
Universidad del Norte, Barranquilla (Colombia), 2009, pp. 1-1.
237. F. Torrens and G. Castellano,  
Asymmetric location of anionic phospholipids in vesicles, in: *Interdisciplinary Transport Phenomena VI*, Ed. S. S. Sadhal,  
University of Southern California, Los Angeles (California), 2009, pp. 1-12.
238. F. Torrens and G. Castellano,  
Exact structure of bacteriophage T4 and infection: Stopping *Escherichia coli*, in: *Synthetic Organic Chemistry XIII*, Eds. J. A. Seijas and M. P. Vázquez Tato,  
MDPI, Basel (Switzerland), 2009, pp. 1-11.
239. J. A. Castillo-Garit, Y. Marrero-Ponce, F. Torrens, R. García-Domenech and J. E. Rodríguez-Borges,  
Applications of bond-based 3D-chiral quadratic indices in QSAR studies related to central chirality codification, in: *Synthetic Organic Chemistry XIII*, Eds. J. A. Seijas and M. P. Vázquez Tato,  
MDPI, Basel (Switzerland), 2009, pp. 1-24.
240. J. A. Castillo-Garit, J. Escobar, Y. Marrero-Ponce and F. Torrens,  
Atom-based quadratic indices to predict aquatic toxicity of benzene derivatives to *Tetrahymena pyriformis*, in: *Synthetic Organic Chemistry XIII*, Eds. J. A. Seijas and M. P. Vázquez Tato,  
MDPI, Basel (Switzerland), 2009, pp. 1-26.

241. F. Torrens and G. Castellano,  
Molecular classification of thiocarbamates with cytoprotection activity against anti-human immunodeficiency virus, in: *Synthetic Organic Chemistry XIII*, Eds. J. A. Seijas and M. P. Vázquez Tato, MDPI, Basel (Switzerland), 2009, pp. 1-25.
242. F. Torrens and G. Castellano,  
Fullerite crystal thermodynamic characteristics and the law of corresponding states, *J. Nanosci. Nanotechn.*, **10**, 1208-1222 (2010).
243. F. Torrens and G. Castellano,  
Cluster nature of the solvent features of single-wall carbon nanohorns, *Int. J. Quantum Chem.*, **110**, 563-570 (2010).
244. J. A. Castillo-Garit, M. C. Vega, M. Rolon, Y. Marrero-Ponce, V. V. Kouznetsov, D. F. Amado Torres, A. Gómez-Barrio, A. Alvarez Bello, A. Montero, F. Torrens and F. Pérez-Giménez,  
Computational discovery of novel trypanosomicidal drug-like chemicals by using bond-based non-stochastic and stochastic quadratic maps and linear discriminant analysis, *Eur. J. Pharm. Sci.*, **39**, 30-36 (2010).
245. F. Torrens and G. Castellano,  
Table of periodic properties of human immunodeficiency virus inhibitors, *Int. J. Comput. Intelligence Bioinf. Syst. Biol.*, **1**, 246-273 (2010).
246. A. T. Balaban, A. Dreiding, P. W. Fowler, I. Gutman, A. Kerber, D. J. Klein, N. S. Zefirov, A. R. Ashrafi, D. Bielińska-Wąca, D. Bonchev, J. Cioslowski, M. V. Diudea, E. Estrada, S. Fujita, V. V. Iliev, S. Klavčar, X. Li, B. Liao, W. Linert, P. G. Mezey, B. Mohar, L. Pogliani, J. Rada, G. Restrepo, C. Rücker, K. Salem, R. Todeschini, F. Torrens, S. S. Tratch, N. Trinajstić, S. Wagner, B. Zhou and B. Furtula, Professor Milan Randić is 80, *MATCH Commun. Math. Comput. Chem.*, **64**, 299-299 (2010).
247. Y. Marrero-Ponce, G. M. Casañola-Martín, M. T. H. Khan, F. Torrens, A. Rescigno and C. Abad,  
Ligand-based computer-aided discovery of tyrosinase inhibitors. Applications of the TOMOCOMD-CARDD method to the elucidation of new compounds, *Curr. Pharm. Des.*, **16**, 2601-2624 (2010).
248. Y. Marrero-Ponce, E. R. Martínez-Albelo, G. M. Casañola-Martín, J. A. Castillo-Garit, Y. Echevería-Díaz, V. Romero Zaldivar, J. Tygat, J. E. Rodríguez Borges, R. García-Domenech, F. Torrens and F. Pérez-Giménez,  
Bond-based linear indices of the non-stochastic and stochastic edge-adjacency matrix. 1. Theory and modeling of ChemPhys properties of organic molecules, *Mol. Divers.*, **14**, 731-753 (2010).
249. F. Torrens and G. Castellano, Experimental studies for modelling the phase behaviour of monomer/polymer/disc composites, *Macromol. Symp.*, **296**, 557-565 (2010).
250. H. Le-Thi-Thu, G. Casas Cardoso, G. M. Casañola-Martín, Y. Marrero-Ponce, A. Puris, F. Torrens, A. Rescigno and C. Abad, QSAR models for tyrosinase inhibitory activity description applying modern statistical classification techniques: A comparative study, *Chemometr. Intell. Lab. Syst.*, **104**, 249-259 (2010).

251. G. M. Casañola-Martin, Y. Marrero-Ponce, M. T. H. Khan, S. B. Khan, F. Torrens, F. Pérez- Jiménez, A. Rescigno and C. Abad, Bond-based 2D quadratic fingerprints in QSAR studies. Virtual and *in vitro* tyrosinase inhibitory activity elucidation, *Chem. Biol. Drug Des.*, **76**, 538-545 (2010).
252. S. E. Ortega-Broche, Y. Marrero-Ponce, Y. E. Díaz, F. Torrens and F. Pérez-Giménez, TOMOCOMD-CAMPS and protein bilinear indices – Novel bio-macromolecular descriptors for protein research: I. Predicting protein stability effects of a complete set of alanine substitutions in the Arc repressor, *FEBS J.*, **277**, 3118-3146 (2010).
253. F. Torrens and G. Castellano,  
Incorporation of silica nanospheres into epoxy-amine materials: Polymer nanocomposites, in: *Encyclopedia of Polymer Composites: Properties, Performance and Applications*, Eds., M. Lechkov and S. Prandzheva, Polymer Science and Technology No. 5, Nova, New York (NY), 2010, chapter 25, pp. 823-844.
254. F. Torrens and G. Castellano, Bacteriófago T4: Reconocimiento e infección en *E. coli*, in: *Sensors and Molecular Recognition*, Ed., M. T. Pardo, Universidad Politécnica de Valencia, València (Spain), 2010, Vol. 3, pp. 1-8.
255. F. Torrens and G. Castellano,  
Molecular classification of thiocarbamates: Cytoprotection activity against anti-human immunodeficiency virus, in: *Bioinformatics and Biomedical Engineering IV*, Ed. K.-C. Chou, IEEE, Piscataway (New Jersey), 2010, pp. 1-4.
256. F. Torrens and G. Castellano,  
Peptide potential energy surfaces and protein folding, in: *Computational and Mathematical Methods in Science and Engineering X*, Ed., J. Vigo-Aguilar, Universidad de Salamanca, Salamanca (Spain), 2010, pp. 1-4.
257. F. Torrens and G. Castellano,  
Solvents/co-solvents of single-wall carbon nanotubes and inclusion complexes, in: *Surfaces, Coatings and Nanostructured Materials V*, Eds., Ali, N., and Ebothe, J., INNOSPACE, Manchester (UK), 2010, pp. 1-3.
258. J. A. Castillo-Garit, M. C. Vega, M. Rolon, Y. Marrero-Ponce, V. V. Kouznetsov, D. F. Amado Torres, A. Gómez-Barrio, A. Alvarez Bello, A. Montero, F. Torrens and F. Pérez-Giménez,  
Computational discovery of novel trypanosomicidal drug-like chemicals by using bond-based non-stochastic and stochastic quadratic maps and linear discriminant analysis, in: *Synthetic Organic Chemistry XIV*, Eds. J. A. Seijas and M. P. Vázquez Tato, MDPI, Basel (Switzerland), 2010, pp. 1-31.
259. F. Torrens and G. Castellano,  
Binding of mono, bi and tridomain proteins to zwitterionic and anionic vesicles: Asymmetric location of anionic phospholipids in mixed zwitterionic/anionic vesicles and cooperative binding, *J. Life Sci.*, **5**, 167-181 (2011).
260. Y. Marrero-Ponce, A. Huesca Guillén, Y. Echevarria Díaz, F. Torrens Zaragoza and F. Ibarra Velarde,  
Novel ligand-based approach to screening of large databases for paramphistomicide lead generation, *Nereis*, (3) 9-15 (2011).

261. F. Torrens Zaragoza,  
Polymer bisphenol-A, the incorporation of silica nanospheres into epoxy–amine materials and polymer nanocomposites,  
*Nereis*, (3) 17-23 (2011).
262. H. Le-Thi-Thu, G. M. Casañola-Martín, Y. Marrero-Ponce, A. Rescigno, L. Saso, V. S. Parmar, F. Torrens and C. Abad,  
Novel coumarin-based tyrosinase inhibitors discovered by OECD principles-validated QSAR approach from an enlarged, balanced database,  
*Mol. Divers.*, **15**, 507-520 (2011).
263. F. Torrens and G. Castellano,  
(Co-)solvent selection for single-wall carbon nanotubes: *Best* solvents, acids, superacids and guest–host inclusion complexes,  
*Nanoscale*, **3**, 2494-2510 (2011).
264. J. A. Castillo-Garit, M. C. Vega, M. Rolón, Y. Marrero-Ponce, A. Gómez-Barrio, J. A. Escario, A. Alvarez Bello, A. Montero, F. Torrens, F. Pérez-Giménez, V. J. Arán and C. Abad,  
Ligand-based discovery of novel trypanosomicidal drug-like compounds: *In silico* identification and experimental support,  
*Eur. J. Med. Chem.*, **46**, 3324-3330 (2011).
265. F. Torrens and G. Castellano,  
Molecular classification of thiocarbamates with cytoprotection activity against human immunodeficiency virus,  
*Int. J. Chem. Model.*, **3**, 269-296 (2011).
266. A. Dreiding, P. W. Fowler, I. Gutman, A. Kerber, D. J. Klein, N. S. Zefirov, A. R. Ashrafi, M. N. Bereberan-Santos, D. Bielińska-Wąca, J. Cioslowski, K. C. Das, M. V. Diudea, E. Estrada, S. Fujita, V. V. Iliev, S. Klavčar, X. Li, B. Liao, W. Linert, B. Liu, P. G. Mezey, B. Mohar, L. Pogliani, J. Rada, C. Rücker, R. Todeschini, F. Torrens, S. S. Tratch, N. Trinajstić, S. Wagner and B. Furtula,  
Professor Alexandru T. Balaban is 80,  
*MATCH Commun. Math. Comput. Chem.*, **66**, 3-3 (2011).
267. H. Le-Thi-Thu, Y. Marrero-Ponce, G. M. Casañola-Martín, G. Casas Cardoso, M. C. Chávez, M. M. García, C. Morell, F. Torrens and C. Abad,  
A comparative study of nonlinear machine learning for the *in silico* depiction of tyrosinase inhibitory activity from molecular structure,  
*Mol. Inf.*, **30**, 527-537 (2011).
268. F. Torrens and G. Castellano,  
Using chemical structural indicators for periodic classification of local anaesthetics,  
*Int. J. Chemoinf. Chem. Eng.*, **1**(2), 15-35 (2011).
269. F. Torrens and G. Castellano, QSPR studies on amino acids: Application to proteins, in: *QSPR– QSAR Studies on Desired Properties for Drug Design, 2010*, Ed. E. A. Castro, Research Signpost, Trivandrum (Kerala, India), 2011, pp. 35-62.
270. F. Torrens and G. Castellano,  
Cooperativity of protein binding to vesicles, in: *Software Tools and Algorithms for Biological Systems*, Eds. H. R. Arabnia and Q.-N. Tran, Advances in Experimental Medicine and Biology No. 696, Springer, New York (NY), 2011, pp. 271-278.

271. F. Torrens and G. Castellano,  
Biología estructural del virus y de las proteínas de la fibra del bacteriófago, in: *Sensors and Molecular Recognition*, Eds., A. M. Costero Nieto, S. Gil Grau and M. Parra Álvarez,  
Universitat de València, València (Spain), 2011, Vol. 4, pp. 17–14.
272. F. Torrens and G. Castellano,  
Metabólica: Elucidación de mecanismo de enfermedad, in: *Sensors and Molecular Recognition*, Ed.,  
M. T. Pardo,  
Universidad Politécnica de Valencia, València (Spain), 2011, Vol. 5, pp. 430-438.
273. G. Castellano, J. Tena and F. Torrens,  
Classification of polyphenolic compounds by chemical structural indicators and its relation to  
antioxidant properties of *Posidonia oceanica* (L.) Delile,  
*MATCH Commun. Math. Comput. Chem.*, **67**, 231-250 (2012).
274. F. Torrens and G. Castellano,  
*Bundlet* model for single-wall carbon nanotubes, nanocones and nanohorns,  
*Int. J. Chemoinf. Chem. Eng.*, **2**(1), 48-98 (2012).
275. F. Torrens, C. M. Gómez, I. S. Monzó, C. Abad and A. Campos,  
Modelling monomer/disc composites phase behaviour,  
*Macromol. Symp.*, **311**, 49-56 (2012).
276. J. A. Castillo Garit, R. García Domenech, Y. Marrero Ponce, F. Torrens Zaragoza and C. Abad  
Mazarío,  
Prediction of the binding affinity of fenoterol derivatives to the  $\beta_2$  adrenergic receptor using atom-based  
3D-chiral linear indices,  
*Nereis*, (4), 9-18 (2012).
277. J. A. Castillo-Garit, C. Abad, J. E. Rodríguez-Borges, Y. Marrero-Ponce and F. Torrens,  
A review of QSAR studies to discover new drug-like compounds actives against *Leishmaniasis* and  
*Trypanosomiasis*,  
*Curr. Top. Med. Chem.*, **12**, 852-865 (2012).
278. J. A. Castillo-Garit, O. del Toro-Cortés, V. V. Kouznetsov, C. Ochoa Puentes, A. R. Romero  
Bohórquez, M. C. Vega, M. Rolón, J. A. Escario, A. Gómez-Barrio, Y. Marrero-Ponce, F. Torrens and  
C. Abad,  
Identification *in silico* and *in vitro* of novel trypanosomicidal drug-like compounds,  
*Chem. Biol. Drug Des.*, **80**, 38-45 (2012).
279. G. M. Casañola-Martín, M. T. H. Khan, H. Le-Thi-Thu, Y. Marrero-Ponce, R. García-Domenech,  
F. Torrens, A. Rescigno and C. Abad,  
Retrained classification of tyrosinase inhibitors and *in silico* potency estimation by using atom-type  
linear indices: A powerful tool for speed up the discovery of leads,  
*Int. J. Chemoinf. Chem. Eng.*, **2**(2), 42-144 (2012).
280. F. Torrens and G. Castellano,  
Estimation of partition coefficients of Fe–S protein models: Se substitutions in  $Fe_4S_4Cys_n$ ,  
*J. Chem. Chem. Eng.*, **6**, 867-877 (2012).

281. F. Torrens and G. Castellano,  
QSPR prediction of retention times of phenylurea herbicides by biological plastic evolution,  
*Curr. Drug Saf.*, **7**, 262-268 (2012).
282. Y. Marrero-Ponce, O. Martínez Santiago, Y. Martínez López, S. J. Barigye and F. Torrens,  
Derivatives in discrete mathematics: A novel graph-theoretical invariant for generating new 2/3D  
molecular descriptors. I. Theory and QSPR application,  
*J. Comput.-Aided Mol. Design*, **26**, 1229-1246 (2012).
283. F. Torrens and G. Castellano,  
Molecular diversity classification *via* information theory: A review,  
*ICST Trans. Complex Syst.*, **12**(10-12), e4-1-8 (2012).
284. F. Torrens and G. Castellano,  
Cluster origin of solvent features of fullerenes, single-wall carbon nanotubes, nanocones, and nanohorns,  
in: *Nanoscience and Advancing Computational Methods in Chemistry: Research Progress*, Eds., E. A. Castro and A. K. Haghi,  
IGI Global, Hershey (PA), 2012, pp. 1-57.
285. F. Torrens and G. Castellano,  
Structural classification of complex molecules by artificial intelligence techniques, in: *Advanced Methods and Applications in Chemoinformatics: Research Progress and New Applications*, Eds., E. A. Castro and A. K. Haghi,  
IGI Global, Hershey (PA), 2012, pp. 25-91.
286. F. Torrens and G. Castellano,  
Proteólisis intracelular y neoplasia: Ubiquitina,  
*Sensors and Molecular Recognition*, Eds., A. M. Costero Nieto, S. Gil Grau and M. Parra Álvarez,  
Universitat de València, València (Spain), 2012, Vol. 6, pp. 1-5.
287. G. M. Casañola-Martin, H. Le-Thi-Thu, Y. Marrero-Ponce, F. Torrens, A. Rescigno, C. Abad and M. T. H. Khan,  
QSAR-based CMs and TOMOCOMD-CARD approach for the discovery of new tyrosinase inhibitor chemicals, in: *Recent Trends on QSAR in the Pharmaceutical Perceptions*, Ed., M. T. H. Khan, Bentham, Bussum (The Netherlands), 2012, pp. 298-341.
288. F. Torrens and G. Castellano,  
Structural classification of complex molecules by information entropy and equipartition conjecture, in: *Chemical Information and Computational Challenges in 21<sup>st</sup> Century*, Ed., M. V. Putz,  
Nova, New York (NY), 2012, pp. 101-139.
289. S. J. Barigye, Y. Marrero-Ponce, Y. Martínez López, O. Martínez Santiago, F. Torrens, R. García Demenech and J. Galvez,  
Event-based criteria in GT-STAF information indices: Theory, exploratory diversity analysis and QSPR applications,  
*SAR QSAR Environ. Res.*, **24**, 3-34 (2013).
290. S. J. Barigye, Y. Marrero-Ponce, Y. Martínez-López, F. Torrens, L. M. Artiles-Martínez, R. W. Pino-Urias and O. Martínez-Santiago,  
Relations frequency hypermatrices in mutual, conditional and joint entropy-based information indices,  
*J. Comput. Chem.*, **34**, 259-274 (2013).

291. Y. Brito-Sánchez, J. A. Castillo-Garit, H. Le-Thi-Thu, Y. González-Madariaga, F. Torrens, Y. Marrero-Ponce and J. E. Rodríguez-Borges, Comparative study to predict toxic modes of action of phenols from molecular structures, *SAR QSAR Environ. Res.*, **24**, 235-251 (2013).
292. F. Torrens and G. Castellano, *Bundle* model of single-wall carbon, BC<sub>2</sub>N and BN nanotubes, cones and horns in organic solvents, *J. Nanomater. Mol. Nanotech.*, **2**, 1000107–1-9 (2013).
293. F. Torrens Zaragoza, Molecular categorization of yams by principal component and cluster analyses, *Nereis*, (5) 41-51 (2013).
294. F. Torrens and G. Castellano, Valence charge-transfer indices and binding of water-soluble, globular proteins to vesicles, *Asia Pacific J. Life Sci.*, **5**, 89-121 (2013).
295. F. Torrens and G. Castellano, Solvent features of cluster single-wall C, BC<sub>2</sub>N and BN nanotubes, cones and horns, *Microelectron. Eng.*, **108**, 127-133 (2013).
296. S. J. Barigye, Y. Marrero-Ponce, O. Martínez Santiago, Y. Martínez López, F. Pérez-Giménez and F. Torrens, Shannon's, mutual, conditional and joint entropy information indices: Generalization of global indices defined from local vertex invariants, *Curr. Comput.-Aided Drug Des.*, **9**, 164-183 (2013).
297. F. Torrens and G. Castellano, Information theoretic entropy for molecular classification: Oxadiazolamines as potential therapeutic agents, *Curr. Comput.-Aided Drug Des.*, **9**, 241-253 (2013).
298. F. Torrens and G. Castellano, Molecular classification of 5-amino-2-arylquinolines and 4-aryl-6,7,8-trimethoxyquinolines as highly potent tubulin polymerization inhibitors, *Int. J. Chemoinf. Chem. Eng.*, **3**(2), 1-26 (2013).
299. G. Castellano, J. L. González-Santander, A. Lara and F. Torrens, Classification of flavonoid compounds by using entropy of information theory, *Phytochemistry*, **93**, 182-191 (2013).
300. F. Torrens and G. Castellano, Corrigendum to: *Solvent features of cluster single-wall C, BC<sub>2</sub>N and BN nanotubes, cones and horns*, *Microelectron. Eng.*, **112**, 168-168 (2013).

301. F. Torrens and G. Castellano,  
C-nanostructures cluster models in organic solvents: Fullerenes, tubes, buds and graphenes,  
*J. Chem. Chem. Eng.*, **7**, 1026-1035 (2013).
302. F. Torrens and G. Castellano,  
Bisphenol, diethylstilbestrol, polycarbonate and the thermomechanical properties of epoxy-silica nanostructured composites,  
*J. Res. Updates Polym. Sci.*, **2**, 183-193 (2013).
303. G. M. Casañola-Martín, Y. Marrero-Ponce, H. LeThi-Thu, M. T. H. Khan, F. Torrens, A. Rescigno and C. Abad,  
La enzima tirosinasa: 2. Inhibidores de origen natural y sintético,  
*Afinidad*, **70**, 270-276 (2013).
304. F. Torrens and G. Castellano,  
Elementary polarizability of Sc/fullerene/graphene aggregates and di/graphene-cation interactions,  
*J. Nanomater. Mol. Nanotech.*, **S1**, 001-1-8 (2013).
305. F. Torrens,  
*Asociaciones Moleculares en Azinas y Macrociclos. Aplicación del Potencial Intermolecular de Fraga, Trans. Molecular Associations in Azines and Macrocycles. Application of Fraga's Intermolecular Potential*,  
ProQuest, Ann Arbor (Michigan), 2013, 291 pp.
306. F. Torrens and G. Castellano,  
Complexity, emergence and molecular diversity via information theory, in: *Complexity Science, Living Systems, and Reflexing Interfaces: New Models and Perspectives*, Eds., F. Orsucci and N. Sala,  
IGI Global, Hershey (PA), 2013, pp. 196-208.
307. F. Torrens and G. Castellano,  
Molecular classification of thiocarbamates with cytoprotection activity against human immunodeficiency virus, in: *Advances in Chemical Modeling, Vol. 3*,  
Nova, New York (NY), 2013, pp. 323-351.
308. F. Torrens and G. Castellano,  
Valence charge-transfer indices and binding of lysozyme, myoglobin and albumin to vesicles, in:  
*Lysozymes: Sources, Functions and Role in Disease*, Eds. Maang, X. G., and Cheung, W. F.,  
Nova, New York (NY), 2013, pp. 95-126.
309. J. A. Castillo-Garit. O. del Toro-Cortés, V. V. Kouznetsov, C. Ochoa Puentes, A. R. Romero Bohorquez, M. C. Vega, M. Rolón, J. A. Escario, A. Gómez-Barrio, Y. Marrero-Ponce, F. Torrens and C. Abad,  
Identification *in silico* and *in vitro* of novel trypanosomicidal drug-like compounds, in: *Synthetic Organic Chemistry XVI*, Eds. J. A. Seijas, M. P. Vázquez Tato and S.-K. Lin,  
MDPI, Basel (Switzerland), 2013, pp. 1-15.
310. F. Torrens and G. Castellano,  
Fractal dimension of mucoadhesive polymer hyaluronan for pharmaceutical formulations, in: *Synthetic Organic Chemistry XVI*, Eds. J. A. Seijas, M. P. Vázquez Tato and S.-K. Lin,  
MDPI, Basel (Switzerland), 2013, pp. 1-14.

311. F. Torrens and G. Castellano,  
Molecular classification, diversity and complexity *via* information entropy, in: *Chaos and Complex Systems*, Eds. S. G. Stavrinides, S. Banerjee, H. Caglar and M. Ozer,  
Springer, Berlin (Germany), 2013, Vol. 4, pp. 1-19.
312. F. Torrens and G. Castellano,  
Bacteriófagos y endolisinas: Conservantes alimentarios, in: *Sensors and Molecular Recognition*, Ed., M. T. Pardo,  
Universidad Politécnica de Valencia, València (Spain), 2013, Vol. 7, pp. 539-548.
313. G. Castellano, A. Lara and F. Torrens,  
Classification of stilbenoid compounds by entropy of artificial intelligence,  
*Phytochemistry*, **97**, 62-69 (2014).
314. F. Torrens Zaragoza,  
Classification of lactic acid bacteria against cytokine immune modulation,  
*Nereis*, (6), 27-37 (2014).
315. F. Torrens and G. Castellano,  
Una nueva herramienta para el estudio de la resonancia en docencia química,  
*Avances en Ciencias e Ingeniería*, **5**(1), 81-91 (2014).
316. F. Torrens and G. Castellano,  
Cluster model expanded to C-nanostructures: Fullerenes, tubes, graphenes and their buds,  
*Austin J. Nanomed. Nanotech.*, **2**(2), 7-1-7 (2014).
317. F. Torrens and G. Castellano,  
QSPR prediction of chromatographic retention times of pesticides: Partition and fractal indices,  
*J. Environ. Sci. Health, Part B*, **49**, 400-407 (2014).
318. F. Torrens and G. Castellano,  
A tool for interrogation of macromolecular structure,  
*J. Mater. Sci. Eng. B*, **4**(2), 55-63 (2014).
319. F. Torrens and G. Castellano,  
Molecular classification of pesticides including persistent organic pollutants, phenylurea and sulphonylurea herbicides,  
*Molecules*, **19**, 7388-7414 (2014).
320. G. M. Casañola-Martín, H. Le-Thi-Thu, Y. Marrero-Ponce, J. A. Castillo-Garit, F. Torrens, A. Rescigno, C. Abad and M. T. H. Khan,  
Tyrosinase enzyme: 1. An overview on a pharmacological target,  
*Curr. Top. Med. Chem.*, **14**, 1494-1501 (2014).

321. J. A. Castillo-Garit, Y. Cañizares-Carmenate, Y. Marrero-Ponce, F. Torrens and C. Abad, Prediction of ADME properties, part 1: Classification models to predict Caco-2 cell permeability using atom-based bilinear indices, *Afinidad*, **71**, 129-138 (2014).
322. F. Torrens and G. Castellano, From Asia to Mediterranean: Soya bean, Spanish legumes and commercial *soya bean* principal component, cluster and meta-analyses, *J. Nutr. Food Sci.*, **4**(5), 98-98 (2014).
323. F. Torrens and G. Castellano, Mucoadhesive polymer hyaluronan as biodegradable cationic/zwitterionic-drug delivery vehicle, *ADMET DMPK*, **2**, 235-247 (2014).
324. F. Torrens and G. Castellano, AIDS destroys immune defences: Hypothesis, *New Front. Chem.*, **23**, 11-20 (2014).
325. G. M. Casañola-Martin, H. Le-Thi-Thu, Y. Marrero-Ponce, J. A. Castillo-Garit, F. Torrens, F. Perez-Gimenez and C. Abad, Analysis of proteasome inhibition prediction using atom-based quadratic indices enhanced by machine learning classification techniques, *Lett. Drug Des. Discov.*, **11**, 705-711 (2014).
326. F. Torrens and G. Castellano, Molecular classification of styrylquinolines as human immunodeficiency virus integrase inhibitors, *Int. J. Chem. Model.*, **6**, 347-376 (2014).
327. F. Torrens and G. Castellano, Cluster solvation models of carbon nanostructures: Extension to fullerenes, tubes and buds, *J. Mol. Model.*, **20**, 2263-1-9 (2014).
328. F. Torrens and G. Castellano, Molecular clustering of phenylurea herbicides: Comparison with sulphonylureas, pesticides and persistent organic pollutants, *Evolv. Trends Eng. Technol.*, **1**, 29-52 (2014).
329. J. C. Garro Martinez, E. G. Vega-Hissi, M. F. Andrada, P. R. Duchowicz, F. Torrens and M. R. Estrada, Lacosamide derivatives with anticonvulsant activity as carbonic anhydrase inhibitors. Molecular modeling, docking and QSAR analysis, *Curr. Comput.-Aided Drug Des.*, **10**, 160-167 (2014)
330. F. Torrens and G. Castellano, Cluster *bundle* model of single-wall C, BC<sub>2</sub>N and BN nanotubes, cones and horns, in: *Nanoscience and Computational Chemistry: Research Progress*, Eds., A. G. Mercader, E. A. Castro and A. K. Haghi, Apple Academic, Waretown (NJ), 2014, pp. 271-307.

331. F. Torrens and G. Castellano,  
Determination of binodal curves in ternary polymer systems: Co-/polymers compatibility. In: *New Developments in Polymer Composites Research*, Eds. S. Laske and A. Witschnigg, Nova, New York (NY), 2014, pp. 243-255.
332. F. Torrens and G. Castellano,  
A new tool for the interrogation of macromolecular structure, in: *Synthetic Organic Chemistry XVII*, Eds. J. A. Seijas, M. P. Vázquez Tato and S.-K. Lin, MDPI, Basel (Switzerland), 2014, pp. 1-16.
333. F. Torrens and G. Castellano,  
Nanostructures cluster models in solution: Extension to C, BC<sub>2</sub>N, and BN fullerenes, tubes, and cones, in: *Contemporary Advancements in Information Technology Development in Dynamic Environments*, Ed., M. Khosrow-Pour, IGI Global, Hershey (PA), 2014, pp. 221-253.
334. F. Torrens and G. Castellano,  
Bacterias acidolácticas: Morfología y metabolismo, *Sensors and Molecular Recognition*, Eds., A. M. Costero Nieto, S. Gil Grau, M. Parra Álvarez and P. Gaviña Costero, Universitat de València, València (Spain), 2014, Vol. 8, pp. 34–1-5.
335. J. A. Castillo-Garit, O. del Toro-Cortés, M. C. Vega, M. Rolón, A. Rojas de Arias, G. M. Casañola-Martin, J. A. Escario, A. Gómez-Barrio, Y. Marrero-Ponce, F. Torrens and C. Abad,  
Bond-based bilinear indices for computational discovery of novel trypanosomicidal drug-like compounds through virtual screening, *Eur. J. Med. Chem.*, **96**, 238-244 (2015).
336. F. Torrens and G. Castellano,  
Valence-topological charge-transfer indices, dipole, isoelectric point and fractal: From homo/heterocycles to proteins, *Curr. Org. Chem.*, **19**, 205-218 (2015).
337. O. Martínez Santiago, Y. Marrero-Ponce, R. Millán Cabrera, S. J. Barigye, Y. Martínez-López, L. M. Artiles Martínez, J. O. Guerra de León, F. Perez-Giménez and F. Torrens,  
Extending graph (discrete) derivative descriptors to *N*-tuple atom-relations, *MATCH Commun. Math. Comput. Chem.*, **73**, 397-420 (2015).
338. F. Torrens Zaragoza,  
Classification of fruits proximate and mineral content: Principal component, cluster, meta-analyses, *Nereis*, (7), 39-50 (2015).
339. G. Castellano and F. Torrens,  
Quantitative structure–antioxidant activity models of isoflavonoids: A theoretical study, *Int. J. Mol. Sci.*, **16**, 12891-12906 (2015).
340. G. Castellano and F. Torrens,  
Information entropy-based classification of triterpenoids and steroids from *Ganoderma*, *Phytochemistry*, **116**, 305-313 (2015).

341. F. Torrens and G. Castellano,  
Computational study of nanosized drug delivery from *cyclodextrins*, crown ethers and hyaluronan in pharmaceutical formulations,  
*Curr. Top. Med. Chem.*, **15**, 1901-1913 (2015).
342. R. Medina Marrero, Y. Marrero-Ponce, S. J. Barigye, Y. Echeverría Díaz, R. Acevedo-Barrios, G. M. Casañola-Martín, M. García Bernal, F. Torrens and F. Pérez-Giménez,  
QuBiLS-MAS method in early drug discovery and rational drug identification of antifungal agents,  
*SAR QSAR Environ. Res.*, **26**, 943-958 (2015).
343. F. Torrens Zaragoza and G. Castellano Estornell,  
Emergence, spread and uncontrolled Ebola outbreak,  
*Basic Clin. Pharmacol. Toxicol.*, **117** (Suppl. 2) 38-38 (2015).
344. F. Torrens and G. Castellano,  
2014 spread/uncontrolled Ebola outbreak,  
*New Front. Chem.*, **24**, 81-91 (2015).
345. F. Torrens and G. Castellano,  
Molecular classification of *N*-aryloxazolidinone-5-carboxamides as human immunodeficiency virus protease inhibitors, in: *Emerging Trends in Computational Biology, Bioinformatics, and Systems Biology: Algorithms and Software Tools*, Eds. Q. N. Tran and H. Arabnia, Elsevier, Amsterdam, 2015, pp. 69-97.
346. F. Torrens and G. Castellano,  
Reflections on the nature of the periodic table of the elements: Implications in chemical education, in: *Synthetic Organic Chemistry*, Eds. J. A. Seijas, M. P. Vázquez Tato and S.-K. Lin, MDPI, Basel (Switzerland), 2015, Vol. 18, pp. 1-15.
347. F. Torrens and G. Castellano,  
Ideas in the history of nano/miniaturization and (quantum) simulators: Feynman, education and research reorientation in translational science, in: *Synthetic Organic Chemistry*, Eds. J. A. Seijas and M. P. Vázquez-Tato, MDPI, Basel (Switzerland), 2015, Vol. 19, pp. 14–1-16.
348. F. Torrens and G. Castellano,  
Reflections on the cultural history of nanominiaturization and quantum simulators (computers), in: *Sensors and Molecular Recognition*, Eds. N. Laguarda Miro, R. Masot Peris and E. Brun Sánchez, Universidad Politécnica de Valencia, València (Spain), 2015, Vol. 9, pp. 1–1-7.
349. H. Le-Thi-Thu, Y. Cañizares-Carmenate, Y. Marrero-Ponce, F. Torrens and J. A. Castillo-Garit,  
Prediction of Caco-2 cell permeability using bilinear indices and multiple linear regression,  
*Lett. Drug Des. Discov.*, **13**, 161-169 (2016).
350. F. Torrens and G. Castellano,  
Ebola virus disease: Questions, ideas, hypotheses and models,  
*Pharmaceuticals*, **9**, 14–6-6 (2016).

351. F. Torrens-Zaragozá,  
Classification of food spices by proximate content: Principal component, cluster, meta-analyses,  
*Nereis*, (8), 23-33 (2016).
352. A. T. Balaban, P. W. Fowler, I. Gutman, A. Kerber, D. J. Klein, A. R. Ashrafi, M. N. Bereberan-Santos, D. Bielińska-Wąc, G. Brinkmann, J. Cioslowski, K. C. Das, M. V. Diudea, E. Estrada, S. Fujita, J. L. G. Guirao, M. Goubko, S. Klavžar, X. Li, W. Linert, B. Mohar, S. Mukwembi, J. L. Palacios, L. Pogliani, M. V. Putz, J. Rada, G. Restrepo, G. Szederkenyi, R. Todeschini, F. Torrens, N. Trinajstić, S. Wagner, P. Willett, Y. Zhang and B. Furtula,  
Professor Fuji Zhang is 80,  
*MATCH Commun. Math. Comput. Chem.*, **76**, 531-532 (2016).
353. J. A. Castillo-Garit, C. Abad, G. M. Casañola-Martin, S. Jones Barigye, F. Torrens and A. Torreblanca,  
Prediction of aquatic toxicity of benzene derivatives to *Tetrahymena pyriformis* according to OECD principles,  
*Curr. Pharm. Des.*, **22**, 5085-5094 (2016).
354. F. Torrens and G. Castellano,  
Cluster origin of solvation features of C-nanostructures in organic solvents, in: *Advancing Pharmaceutical Processes and Tools for Improved Health Outcomes*, Ed., T. M. Gasmelseid, IGI Global, Hershey (PA), 2016, pp. 189-293.
355. F. Torrens and G. Castellano,  
Nanominiaturation and quantum computing, in: *Sensors and Molecular Recognition*, Eds., A. M. Costero Nieto, M. Parra Álvarez, P. Gaviña Costero and S. Gil Grau, Universitat de València, València (Spain), 2016, Vol. 10, pp. 31–1-5.
356. F. Torrens, L. Redondo and G. Castellano,  
Artemisinin: Tentative mechanism of action and resistance,  
*Pharmaceuticals*, **10**, 20–4-4 (2017).
357. F. Torrens Zaragozá,  
Calculation of restricted volume for nanoparticles that can point,  
*Nereis*, (9), 25-38 (2017).
358. J. A. Castillo-Garit, G. M. Casañola-Martin, S. J. Barigye, H. Pham-The, F. Torrens and A. Torreblanca,  
Machine learning-based models to predict modes of toxic action of phenols to *Tetrahymena pyriformis*,  
*SAR QSAR Environ. Res.*, **28**, 735-747 (2017).
359. Y. Martínez-López, Y. Caballero, S. J. Barigye, Y. Marrero-Ponce, R. Millán-Cabrera, J. Madera, F. Torrens and J. A. Castillo-Garit,  
State of the art review and report of new tool for drug discovery,  
*Curr. Top. Med. Chem.*, **17**, 2957-2976 (2017).
360. Y. Marrero-Ponce, Y. González Castañeda, R. Vivas-Reyes, F. M. Vergara, V. J. Arán, J. A. Castillo-Garit, F. Pérez-Giménez, F. Torrens, H. Le-Thi-Thu, H. Pham-The, Y. Vera Montenegro and F. Ibarra-Velarde,  
Dry selection and wet evaluation for the rational discovery of new anthelmintics,  
*Mol. Phys.*, **115**, 2300-2313 (2017).

361. G. Castellano, L. Redondo and F. Torrens,  
QSAR of natural sesquiterpene lactones as inhibitors of Myb-dependent gene expression,  
*Curr. Top. Med. Chem.*, **17**, 3256-3268 (2017).
362. F. Torrens and G. Castellano,  
Graphene and fullenene clusters: Molecular polarizability and ion–di/graphene associations, in:  
*Sustainable Nanosystems Development, Properties, and Applications*, M. V. Putz and M. C. Mirica, Eds.,  
IGI Global, Hershey (PA), 2017, pp. 569-599.
363. F. Torrens and G. Castellano,  
QSPR prediction of retention times of chlorogenic acids in coffee by bioplastic evolution, in:  
*Quantitative Structure-activity Relationship*, Ed., F. Kandemirli,  
InTechOpen, Vienna (Austria), 2017, pp. 45-61.
364. F. Torrens and G. Castellano,  
Dialectic walk on science, in: *Sensors and Molecular Recognition*, Eds. N. Laguarda Miro, R. Masot  
Peris and E. Brun Sánchez,  
Universidad Politécnica de Valencia, València (Spain), 2017, Vol. 11, pp. 271-275.
365. F. Torrens and G. Castellano,  
QSPR prediction of retention times of methylxanthines and cotinine by bioplastic evolution,  
*Int. J. Quant. Struct.-Prop. Relat.*, **3**, 74-87 (2018).
366. L. Redondo-Cuevas, G. Castellano, F. Torrens and V. Raikos,  
Revealing the relationship between vegetable oil composition and oxidative stability: A multifactorial  
approach,  
*J. Food Compos. Anal.*, **66**, 221-229 (2018).
367. F. Torrens,  
Meet our Editorial Board Member: Dr. Francisco Torrens,  
*Curr. Drug Discov. Technol.*, **15**, 79-80 (2018).
368. F. Torrens Zaragoza,  
Stability of colloids in negatively co-operative melittin–phospholipid,  
*Nereis*, (10), 37-56 (2018).
369. F. Torrens and G. Castellano,  
Conductive layered metal–organic frameworks: A chemistry problem,  
*Int. J. Phys. Study Res.*, **1**(2), 42-42 (2018).
370. J. A. Castillo-Garit, N. Flores-Balmaseda, O. Álvarez, H. Pham-The, V. Pérez-Doñate, F. Torrens,  
F. Pérez-Giménez,  
Computational identification of chemical compounds with potential activity against *Leishmania  
amazonensis* using nonlinear machine learning techniques,  
*Curr. Top. Med. Chem.*, **18**, 2347-2354 (2018).

371. A. K. Haghi, L. Pogliani, F. Torrens, D. Balköse, O. V. Mukbaniani and A. G. Mercader (Eds.), *Applied Chemistry and Chemical Engineering*, Apple Academic–CRC, Waretown (NJ), 2018, Vol. 3, pp. 1-390.
372. F. Torrens and G. Castellano, Local anesthetics classification: Artificial intelligence information entropy, in: *Applied Chemistry and Chemical Engineering*, Eds., A. K. Haghi, L. Pogliani, F. Torrens, D. Balköse, O. V. Mukbaniani and A. G. Mercader, Apple Academic–CRC, Waretown (NJ), 2018, Vol. 3, pp. 313-345.
373. A. K. Haghi, A. C. F. Ribeiro, L. Pogliani, D. Balköse, F. Torrens and O. V. Mukbaniani (Eds.), *Applied Chemistry and Chemical Engineering*, Apple Academic–CRC, Waretown (NJ), 2018, Vol. 5, pp. 1-369.
374. F. Torrens, D. Balköse and S. Thomas (Eds.), *High-Performance Materials and Engineered Chemistry*, Apple Academic–CRC, Waretown (NJ), 2018, pp. 1-400.
375. F. Torrens and G. Castellano, Principal component, cluster, and meta-analyses of soya bean, Spanish legumes, and commercial *soya bean*, in: *High-Performance Materials and Engineered Chemistry*, F. Torrens, D. Balköse and S. Thomas (Eds.), Apple Academic–CRC, Waretown (NJ), 2018, pp. 267-294.
376. F. Torrens, L. Redondo and G. Castellano, Reflections on artemisinin, proposed molecular mechanism of bioactivity and resistance, in: *Applied Physical Chemistry with Multidisciplinary Approaches*, A. K. Haghi, D. Balköse and S. Thomas (Eds.), Apple Academic–CRC, Waretown (NJ), 2018, pp. 189-215.
377. F. Torrens and G. Castellano, Classification of *Citrus*: Principal components, cluster, and meta-analyses, in: *Applied Physical Chemistry with Multidisciplinary Approaches*, A. K. Haghi, D. Balköse and S. Thomas (Eds.), Apple Academic–CRC, Waretown (NJ), 2018, pp. 217-234.
378. F. Torrens and G. Castellano, Superconductors, superconductivity, BCS theory, and *entangled* photons for quantum computing, in: *Physical Chemistry for Engineering and Applied Sciences: Theoretical and Methodological Implication*, A. K. Haghi, C. N. Aguilar, S. Thomas and K. M. Praveen (Eds.), Apple Academic–CRC, Waretown (NJ), 2018, pp. 379-387.
379. F. Torrens and G. Castellano, Nanoscience: From a two-dimensional to a three-dimensional periodic table of the elements, in: *Methodologies and Applications for Analytical and Physical Chemistry*, A. K. Haghi, S. Thomas, S. Palit and P. Main (Eds.), Apple Academic–CRC, Waretown (NJ), 2018, pp. 3-26.
380. F. Torrens and G. Castellano, Nanominiaturization, classical/quantum computers/simulators, superconductivity, and universe, in: *Methodologies and Applications for Analytical and Physical Chemistry*, A. K. Haghi, S. Thomas, S. Palit and P. Main (Eds.), Apple Academic–CRC, Waretown (NJ), 2018, pp. 27-44.

381. F. Torrens and G. Castellano,  
Molecular classification of caffeine, its metabolites and nicotine metabolite, in: *Frontiers in Computational Chemistry*, Eds. Z. Ul-Haq and A. K. Wilson, Bentham, Hilversum (Holland), 2018, Vol. 4, pp. 184-224.
382. F. Torrens and G. Castellano,  
El trabajo con nanomateriales. Consideraciones filosóficas: Reduccionismo/positivismo y éticas, in: *Tecnología e Innovación Social: Hacia un Desarrollo Inclusivo y Sostenible*, R. Feltrero (Ed.), Desafíos Intelectuales del Siglo XXI No. 1, Global Knowledge Academics, Cantoblanco (Madrid), Spain, 2018, pp. 11-35.
383. F. Torrens and G. Castellano,  
Working nanomaterials: Is principle of caution enough?, in: *Sensors and Molecular Recognition*, Eds., A. M. Costero Nieto, M. Parra Álvarez, P. Gaviña Costero and S. Gil Grau, Universitat de València, València (Spain), 2018, Vol. 12, pp. 11–1-6.
384. F. Torrens-Zaragozá and G. Castellano-Estornell,  
Environmental nanomaterials chemistry: Reflections, in: *Intersanitario*, L. Lacomba-Trejo, T. Ibáñez-Prieto, D. A. Bellver, A. García Nicolás, M. Miguel Tamarit, J. Lloria Varella, M. P. Sanz Segre, P. Carulla Pascual, J. Mateu, A. Romero Losana and A. Chaves García (Eds.), ImpulSalud, València (Spain), 2018, pp. 1-16.
385. F. Torrens and G. Castellano,  
Molecular classification of antitubulin agents with indole ring binding at colchicine-binding site, in: *Molecular Insight of Drug Design*, Ed., A. A. Parikesit, InTechOpen, Vienna (Austria), 2018, pp. 47-67.
386. F. Torrens and G. Castellano,  
Conductive two-dimensional nanomaterials: Metal–organic frameworks, *J. Appl. Phys. Nanotech.*, **2**(2), 52-52 (2019).
387. F. Torrens-Zaragozá,  
From layered materials to bidimensional metal–organic frameworks, *Nereis*, (11), 65-80 (2019).
388. F. Torrens and G. Castellano,  
Brownian motion, random trajectory, diffusion, fractals, theory of chaos, and dialectics, in: *Modern Physical Chemistry: Engineering Models, Materials, and Methods with Applications*, R. Haghi, E. Besalú, M. Jaroszewski, S. Thomas and K. M. Praveen (Eds.), Apple Academic–CRC, Waretown (NJ), 2019, pp. 3-12.
389. F. Torrens and G. Castellano,  
Nanomaterials, molecular ion magnets, ultrastrong and spin–orbit couplings in quantum materials, in: *Physical Chemistry for Chemists and Chemical Engineers: Multidisciplinary Research Perspectives*, A. V. Vakhrushev, R. Haghi and J. V. de Julián-Ortiz (Eds.), Apple Academic–CRC, Waretown (NJ), 2019, pp. 181-190.
390. R. Haghi and F. Torrens (Eds.),  
*Engineering Technology and Industrial Chemistry with Applications*, Apple Academic–CRC, Waretown (NJ), 2019, pp. 1-338.

391. F. Torrens and G. Castellano,  
Nuclear fusion and the American nuclear cover-up in Spain: Palomares disaster (1966), in: *Engineering Technology and Industrial Chemistry with Applications*, R. Haghi and F. Torrens (Eds.),  
Apple Academic–CRC, Waretown (NJ), 2019, pp. 297-308.
392. F. Torrens and G. Castellano,  
Molecular classification of 2-phenylindole-3-carbaldehydes as potential antimitotic agents in human breast cancer cells, in: *Theoretical Models and Experimental Approaches in Physical Chemistry: Research Methodology and Practical Methods*, A. K. Haghi, S. Thomas, K. M. Praveen and A. R. Pai (Eds.),  
Apple Academic–CRC, Waretown (NJ), 2019, pp. 221-248.
393. F. Torrens and G. Castellano,  
EPR paradox, quantum *decoherence*, *qubits*, goals, and opportunities in quantum simulation, in: *Theoretical Models and Experimental Approaches in Physical Chemistry: Research Methodology and Practical Methods*, A. K. Haghi, S. Thomas, K. M. Praveen and A. R. Pai (Eds.),  
Apple Academic–CRC, Waretown (NJ), 2019, Vol. 5, pp. 319-336.
394. F. Torrens and G. Castellano,  
*Horchata de chufa*: Healthy, digestive-disease-prevention properties, treatment, and cautions, in: *Applied Food Science and Engineering with Industrial Applications*, C. N. Aguilar and E. Carvajal- Millan (Eds.),  
Apple Academic–CRC, Waretown (NJ), 2019, pp. 219-231.
395. F. Torrens and G. Castellano,  
Meta-analysis of underutilized beans with nutrients profile, in: *Applied Food Science and Engineering with Industrial Applications*, C. N. Aguilar and E. Carvajal-Millan (Eds.),  
Apple Academic–CRC, Waretown (NJ), 2019, pp. 247-277.
396. F. Torrens and G. Castellano,  
Molecular classification of algae by phenolics and antioxidants, in: *Applied Food Science and Engineering with Industrial Applications*, C. N. Aguilar and E. Carvajal-Millan (Eds.),  
Apple Academic–CRC, Waretown (NJ), 2019, pp. 279-303.
397. F. Torrens and G. Castellano,  
Extraction of natural products found in vegetal species: Clove/*Citrus*, in: *Applied Food Science and Engineering with Industrial Applications*, C. N. Aguilar and E. Carvajal-Millan (Eds.),  
Apple Academic–CRC, Waretown (NJ), 2019, pp. 305-318.
398. F. Torrens and G. Castellano,  
Beer, all a science, alcohol: Analysis and quality testing at multiple brewery stages, in: *Chemical Technology and Informatics in Chemistry with Applications*, A. V. Vakhrushev, O. V. Mukbaniani and H. Susanto (Eds.),  
Apple Academic–CRC, Waretown (NJ), 2019, pp. 99-108.
399. F. Torrens and G. Castellano,  
Chlorofluorocarbons, ozone levels evaluation, people actions, tropospheric O<sub>3</sub>, and air quality, in: *Chemical Technology and Informatics in Chemistry with Applications*, A. V. Vakhrushev, O. V. Mukbaniani and H. Susanto (Eds.),  
Apple Academic–CRC, Waretown (NJ), 2019, pp. 195-203.
400. F. Torrens and G. Castellano,  
Superconductivity and quantum computing *via* magnetic molecules, in: *Composite Materials for Industry, Electronics, and the Environment: Research and Applications*, O. V. Mukbaniani, D. Balköse, H. Susanto and A. K. Haghi, (Eds.),  
Apple Academic–CRC, Waretown (NJ), 2019, pp. 201-209.

401. F. Torrens and G. Castellano,  
Nanodevices and organization of single ion magnets and spin *qubits*, in: *Chemical Science and Engineering Technology: Perspectives on Interdisciplinary Research*, D. Balköse, A. C. F. Ribeiro, A. K. Haghi, S. C. Ameta and T. Chakraborty (Eds.),  
Apple Academic–CRC, Waretown (NJ), 2019, pp. 67-74.
402. F. Torrens and G. Castellano,  
Developing sustainability *via* nanosystems and devices: Science–ethics, in: *Chemical Science and Engineering Technology: Perspectives on Interdisciplinary Research*, D. Balköse, A. C. F. Ribeiro, A. K. Haghi, S. C. Ameta and T. Chakraborty (Eds.),  
Apple Academic–CRC, Waretown (NJ), 2019, pp. 75-84.
403. F. Torrens and G. Castellano,  
Information entropy, in: *New Frontiers in Nanochemistry: Concepts, Theories, and Trends*, Ed., M. V. Putz,  
Apple Academic–CRC, Waretown (NJ), 2019, Vol. 1, pp. 249-257.
404. F. Torrens and G. Castellano,  
Molecular classification, in: *New Frontiers in Nanochemistry: Concepts, Theories, and Trends*, Ed., M. V. Putz,  
Apple Academic–CRC, Waretown (NJ), 2019, Vol. 1, pp. 307-313.
405. F. Torrens and G. Castellano,  
Periodic law, in: *New Frontiers in Nanochemistry: Concepts, Theories, and Trends*, Ed., M. V. Putz,  
Apple Academic–CRC, Waretown (NJ), 2019, Vol. 1, pp. 389-395.
406. F. Torrens and G. Castellano,  
Periodic property, in: *New Frontiers in Nanochemistry: Concepts, Theories, and Trends*, Ed., M. V. Putz,  
Apple Academic–CRC, Waretown (NJ), 2019, Vol. 1, pp. 397-402.
407. F. Torrens and G. Castellano,  
Periodic table, in: *New Frontiers in Nanochemistry: Concepts, Theories, and Trends*, Ed., M. V. Putz,  
Apple Academic–CRC, Waretown (NJ), 2019, Vol. 1, pp. 403-425.
408. F. Torrens and G. Castellano,  
From medical diagnosis to data visualization to works of art, in: *Sensors and Molecular Recognition*,  
Eds.,  
Universidad Politécnica de Valencia, València (Spain), 2019, Vol. 13, pp. 1-4.

## DOCTORAL DISSERTATIONS

1. Master in General Biochemistry, Yovani Marrero Ponce, Topological MOlecular COMputer Design (TOMOCOMD), un Novedoso Enfoque para el Diseño Molecular Computacional, *Trans. Topological MOlecular COMputer Design (TOMOCOMD), a Novel Approach for Computational Molecular Design*, Facultad de Ciencias Médicas, Universidad Central de Las Villas, 2004.
2. Tesis Doctoral en Ciencias Químicas, *Trans. Ph.D. in Chemical Sciences*, Yovani Marrero Ponce, Índices Cuadráticos Moleculares. Aplicaciones al Diseño Molecular en Estudios QSAR, *Trans. Molecular Quadratic Indices. Applications to Molecular Design in QSAR Studies*, Facultad de Química, Universidad de La Habana, 2005.
3. Tesis Doctoral en Ciencias Farmacéuticas, *Trans. Ph.D. in Pharmaceutical Sciences*, Juan Alberto Castillo Garit, Parametrización de la Estructura Química Empleando Formas Lineales: Aplicaciones al Diseño Molecular Asistido por Ordenador, *Trans. Parameterization of Chemical Structure Using Linear Forms: Applications to Computer-Assisted Molecular Design*, Facultad de Ciencias Médicas, Universidad de La Habana, 2008.
4. Consultant. Tesis Doctoral en Ciencias Farmacéuticas, *Trans. Ph.D. in Pharmaceutical Sciences*, Huong Le Thu Thu, Nuevos Modelos Matemáticos y Estrategias de Cribado Virtual para el Descubrimiento de Potentes Inhibidores de la Enzima Tirosinasa, *Trans. New Mathematical Models and Virtual Screening Strategies for the Discovery of Potent Inhibitors of the Enzyme Tyrosinase*, Facultad de Química–Farmacia, Universidad Central de Las Villas, 2012.
5. Tesis Doctoral en Investigación y Desarrollo, *Trans. Ph.D. in Research and Development*, Ana María Lara, Clasificación de flavonoides y estilbenos en base a su relación estructura–actividad antioxidante mediante técnicas de inteligencia artificial, *Trans. Classification of flavonoids and stilbenes on the basis of their structure–anti-oxidant activity relationship through techniques of artificial intelligence*, Facultad de Veterinaria y Ciencias Experimentales, Universidad Católica de Valencia *San Vicente Mártir*, December 15, 2014.
6. Tesis Doctoral en Investigación y Desarrollo, *Trans. Ph.D. in Research and Development*, Adela León, Relación estructura–actividad de compuestos derivados del 6-diazo-5-oxo-norleucina (DON), *Trans. Structure–activity relationship of compounds derived from 6-diazo-5-oxo-norleucine (DON)*, Facultad de Veterinaria y Ciencias Experimentales, Universidad Católica de Valencia *San Vicente Mártir*, Estimated 2020.

DIFFUSED PROGRAMS:

1. F. Torrens, R. Montaña y J. Sánchez-Marín,  
*Program AMYR*,  
Supercomputing by University People for Education and Research, 1989
2. F. Torrens, E. Ortí y J. Sánchez-Marín,  
*Program TOPO*,  
Supercomputing by University People for Education and Research, 1990
3. F. Torrens, E. Ortí and J. Sánchez-Marín,  
*Program AMYRVF*,  
CPC Program Library No. ACBG, 1991.
4. F. Torrens,  
*Program MMID2*,  
Free Software Foundation, 1994.
5. F. Torrens,  
*Program QDNLFILT-MEAN*,  
Free Software Foundation, 1997.
6. F. Torrens,  
*Program QDNLFILT-MEDIAN*,  
Free Software Foundation, 1997.
7. F. Torrens,  
*Program QDNLFILT-GRADIENT*,  
Free Software Foundation, 1997.
8. F. Torrens,  
*Program CHEMISTRY*,  
Free Software Foundation, 1997.
9. F. Torrens, M. Rubio and J. Sánchez-Marín,  
*Program AMYR2*,  
CPC Program Library No. ADIW, 1998.
10. F. Torrens,  
*Program GRAPHLIB*,  
Free Software Foundation, 1998.

11. F. Torrens,  
*Program SCAP*,  
Free Software Foundation, 1998.

12. F. Torrens,  
*Program BABELPDB*,  
Free Software Foundation, 1998.

13. F. Torrens,  
*Program AQUAFAC*,  
Free Software Foundation, 1999.

14. F. Torrens,  
*Program ECEPPID2*,  
Free Software Foundation, 2000.

15. F. Torrens,  
*Program TREEF*,  
Free Software Foundation, 2001.

16. F. Torrens,  
*Program COMPLEXF*,  
Free Software Foundation, 2001.

17. F. Torrens,  
*Program PAPID*,  
Free Software Foundation, 2002.

18. F. Torrens,  
*Program POLAR*,  
Free Software Foundation, 2002.

19. F. Torrens,  
*Program BABELPDB2*,  
Free Software Foundation, 2002.

20. F. Torrens,  
*Program MMIDX*,  
Free Software Foundation, 2003.

21. F. Torrens,  
*Program TRANSLATOR-SE*,  
Free Software Foundation, 2004.

22. F. Torrens,  
*Program TRANSLATOR-SC*,  
Free Software Foundation, 2004.

## DATA BASES:

1. F. Torrens, R. Montañaana and J. Sánchez-Marín,  
*Program AMYR*,  
Supercomputing by University People for Education and Research, 1989.
2. F. Torrens, E. Ortí and J. Sánchez-Marín,  
*Program TOPO*,  
Supercomputing by University People for Education and Research, 1990.
3. F. Torrens,  
*Ph. D. Dissertation*, Asociaciones Moleculares en Azinas y Macrociclos. Aplicación del Potencial Intermolecular de Fraga,  
Base de Datos TESEO, Ministerio de Educación y Ciencia, 1990.
4. F. Torrens,  
*Ph. D. Dissertation*, Molecular Associations in Azines and Macrocycles. Application of Fraga's Intermolecular Potential,  
Dissertations Publishing DAI C, University Microfilms International, 1990.
5. F. Torrens, J. Sánchez-Marín and E. Ortí,  
Logiciel AMYR, in *Logiciels pour la Chimie*,  
Société Française de Chimie, Paris, 1991, pp. 30-31.
6. F. Torrens, J. Sánchez-Marín and E. Ortí,  
Logiciel TOPO, in *Logiciels pour la Chimie*,  
Société Française de Chimie, Paris, 1991, pp. 278-279.

## REFERENCES:

1. Serafín Fraga, Department of Chemistry, University of Alberta, Edmonton, Alberta, Canada T6G 2G2, fraga@mapi.chem.ualberta.ca.
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