Juan J. Freire,

Emeritus Professor, Universidad Nacional de Educación a Distancia (UNED), Madrid (Spain).

PhD. Universidad Complutense de Madrid, 1975.

Postdoctoral Associate, Yale University, 1975-77.

Associate Professor/Professor, Universidad Complutense, 1978-2004.

2004-2020. Professor in UNED.

Research Projects

Coordinator of 8 National Projects (Spanish Ministery for Research) and Spanish Coordinator of 2 Network Projects from European Frames.

Some recent publications

- "Conformational Properties of Branched Polymers: Theory and Simulations" J. J. Freire. Adv. Polym. Sci. 143, 35 (1999).

- "Determination of Potential Parameters for Alkanes" A. Lopez Rodriguez, C. Vega and J. J. Freire. J. Chem. Phys. 111, 438 (1999).

- "Conformational Properties of Polymer Chains in the Theta Region" A. M. Rubio, J. J. Freire, C. W. Yong and J. H. R. Clarke. J. Chem. Phys. 111, 1302 (1999).

- "Interaction between Two Star Chains in a Good Solvent" A. M. Rubio and J. J. Freire. Comp. and Theor. Polymer Science, 10, 89 (2000).

- "Phase Separation of Binary Homopolymer and Ternary Homopolymer-Copolymer Mixtures through Gibbs Ensemble Simulations" A. Poncela, A. M. Rubio and J. J. Freire. J. Chem. Phys. 114, 8174 (2001).

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- "Monte Carlo Simulation of Star Polymer Systems with the Bond Fluctuation Model" A. Di Cecca and J. J. Freire. Macromolecules, 35, 2851 (2002).

- "Cyclization Kinetics of Nondiluted Bond Fluctuation Chains" A. M. Rubio, M. Pita and J. J. Freire. Macromolecules, 35, 5681 (2002).

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- "Effects of the Chain Architecture on the Miscibility of Symmetric Linear/Linear and Star/Star Polymer Blends" P. E. Theodorakis, A. Avgeropoulos, J. J. Freire, M. Kosmas, and C. Vlahos, Macromolecules 39, 4235 (2006).

- "Polyfunctional MDI oligomers through dendrimerization" M. Martinelli, M. Calderón, E. Rodríguez, J. J. Freire and M. C. Strumia, Eur. Polym. J. 43, 1978 (2007).

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- "Influence of Chain Topology and Bond Potential on the Glass Transition of Polymer Chains Simulated with the Bond Fluctuation Model" J. J. Freire, J. Phys.: Condens. Matter 20, 285102 (2008).

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- "Coarse-Grained Model for Polybenzylether Dendritic Molecules" J. J. Freire, Soft Matter 5, 1912 (2009).

- "Molecular dynamics simulation of miscibility in several polymer blends" A. Ahmadi and J. J. Freire, Polymer, 50, 4973 (2009).

- “Forcefield parameterization and molecular dynamics simulation of flexible POSSlinked (NHC) (phosphine) Ru catalytic complexes” A. Ahmadi, C. McBride, J. J. Freire, A. Kajetanowicz, J. Czaban and K. Grela, J. Phys. Chem. A, 115, 12017 (2011).

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-"Enhancing Polymer Blend Compatibility with Linear and Complex Star Copolymer Architectures: A Monte Carlo Simulation Study with the Bond Fluctuation Model" J.J. Freire and C. Vlahos, Polymers, 16, 1626 (2024).

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5 most cited articles:

"Theory of DNA Melting Curves" Fixman M, Freire JJ, Biopolymers 16 (12): 2693-2704, 1977. 206 citations.

"Conformational Properties of Branched Polymers: Theory and Simulations" J. J. Freire. Adv. Polym. Sci. 143, 35 (1999). 127 citations.

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Other research indicators

In the list “Most Cited Chemists, 1983-1997”, based in Science Citation Index

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Editorial Board Member of “Polymers”, since March, 2021.

In the list of the 2% top scientists according to bibliographic data “Updated science-wide author databases of standardized citation indicators” (Elsevier, SciTech Strategies, Stanford), October, 2021, DOI:10.17632/btchxktzyw.3.

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