

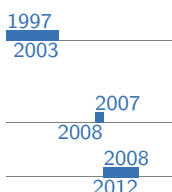
Ricardo Rodríguez Schmidt

PhD in Computational Chemistry

Born: Santiago de
Compostela, 1979
Nationality: Spanish
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in Ricardo Rodríguez



Education



BSc Chemical Engineering, *University of Murcia*, Murcia.

Dissertation prepared in Kaiserslautern (Germany) with an Erasmus Grant

MSc Molecular Chemistry, *University of Murcia*, Murcia.

PhD, *Dept. of Physical Chemistry, University of Murcia*, Murcia.

Passed with distinction and International Doctorate Mention

PhD thesis

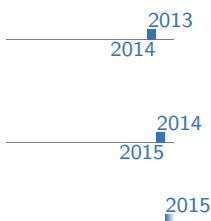
title
supervisors
description

Simulation of Properties of Polymers in Solution

José García de la Torre and José Ginés Hernández Cifre

Brownian Dynamics and Montecarlo Simulation techniques were evaluated and applied to compare simulation results with laboratory experimental data on macromolecules in aqueous solution

Work Experience



Research assistant, *Dept. of Physical Chemistry, University of Murcia*, Murcia.

Technical assistance in development of computer tools and scientific and teaching materials

Head of IT, *Artificial Intelligence Talentum*, Murcia.

Software design, development and system administration

Research assistant, *Bio-HPC Research Group, Catholic University of Murcia (UCAM)*, Murcia.

Research assistant in a joint project between UCAM and Artificial Intelligence Talentum

Languages

Spanish	Native	<i>Mother Tongue</i>
English	Fluent	<i>ECTS B2 Degree, Official Languages School of Murcia</i>
German	Fluent	<i>German ascendance, ECTS B2 Degree, Official Languages School of Murcia</i>

Interests

Computers
Sport

General interest in computers: administration, networks, programming
Running, cycling, hiking

Skills

Development

Languages
Databases

C#, Java, Fortran, Python, Bash, MQL4, PHP
MySQL

IT Systems Administration

O.S.

GNU/Linux, MS Windows

Scientific software packages

Matlab, R

Journal Publications

2015

Rodriguez Schmidt, R., J. G. Hernandez Cifre, and J. Garcia de la Torre. "Multi-Scale Simulation of Hyperbranched Polymers". In: *Polymers* 7.4, pp. 610–628.

2012

Rodriguez Schmidt, R., J. G. Hernandez Cifre, and J. Garcia de la Torre. "Translational diffusion coefficients of macromolecules". In: *EUROPEAN PHYSICAL JOURNAL E* 35.12.

2011

Maleki, Atoosa, Kaizheng Zhu, Ramon Pamies, Ricardo Rodriguez Schmidt, Anna-Lena Kjoniksen, Goeran Karlsson, Jose G. Hernandez Cifre, Jose Garcia de la Torre, and Bo Nystroem. "Effect of polyethylene glycol (PEG) length on the association properties of temperature-sensitive amphiphilic triblock copolymers (PNIPAAm(m)-b-PEG(n)-b-PNIPAAm(m)) in aqueous solution". In: *SOFT MATTER* 7.18, pp. 8111–8119.

2011

Rodriguez Schmidt, Ricardo, Jose G. Hernandez Cifre, and Jose Garcia de la Torre. "Comparison of Brownian dynamics algorithms with hydrodynamic interaction". In: *JOURNAL OF CHEMICAL PHYSICS* 135.8.

2010

Garcia de la Torre, Jose, Alvaro Ortega, Diego Amoros, Ricardo Rodriguez Schmidt, and Jose G. Hernandez Cifre. "Methods and Tools for the Prediction of Hydrodynamic Coefficients and Other Solution Properties of Flexible Macromolecules in Solution. A Tutorial Minireview". In: *MACROMOLECULAR BIOSCIENCE* 10.7, SI, pp. 721–730.

2010

Pamies, Ramon, Ricardo Rodriguez Schmidt, Maria del Carmen Lopez Martinez, and Jose Garcia de la Torre. "The influence of mono and divalent cations on dilute and non-dilute aqueous solutions of sodium alginates". In: *CARBOHYDRATE POLYMERS* 80.1, pp. 248–253.

2010

Rodriguez Schmidt, Ricardo, Ramon Pamies, Anna-Lena Kjoniksen, Kaizheng Zhu, Jose G. Hernandez Cifre, Bo Nystrom, and Jose Garcia de la Torre. "Single-Molecule Behavior of Asymmetric Thermoresponsive Amphiphilic Copolymers in Dilute Solution". In: *JOURNAL OF PHYSICAL CHEMISTRY B* 114.27, pp. 8887–8893.

2009

Del Rio Echenique, Gustavo, Ricardo Rodriguez Schmidt, Juan J. Freire, Jose G. Hernandez Cifre, and Jose Garcia de la Torre. "A Multiscale Scheme for the Simulation of Conformational and Solution Properties of Different Dendrimer Molecules". In: *JOURNAL OF THE AMERICAN CHEMICAL SOCIETY* 131.24, pp. 8548–8556.

2009

Garcia de la Torre, Jose, Jose G. Hernandez Cifre, Alvaro Ortega, Ricardo Rodriguez Schmidt, Miguel X. Fernandes, Horacio E. Perez Sanchez, and R. Pamies. "SIMUFLEX: Algorithms and Tools for Simulation of the Conformation and Dynamics of Flexible Molecules and Nanoparticles in Dilute Solution". In: *JOURNAL OF CHEMICAL THEORY AND COMPUTATION* 5.10, pp. 2606–2618.