



CONSEJO SUPERIOR DE INVESTIGACIONES CIENTÍFICAS

Curriculum Vitae (Date of revision: 30/05/2012)

1. PERSONAL

Last Name: Garrido

Name: Leoncio

Birthplace: Medina del Campo, SPAIN

2. EDUCATION

- D.Sc. in Chemistry; University of Valladolid, Spain; 1982
- "Licenciatura" in Chemistry; University of Valladolid, Spain; 1977

3. PROFESSIONAL APPOINTMENTS

Present position:

Research Scientist, Instituto de Ciencia y Tecnología de Polímeros, CSIC

Address:

Departamento de Química Física
 Instituto de Ciencia y Tecnología de Polímeros, CSIC
 Juan de la Cierva 3,
 E-28006 Madrid, SPAIN
 Tel.: +34 91 561 8806, ext. 319
 Fax: +34 91 564 4853
 E-mail: lgarrido@cetef.csic.es

Previous positions:

- Director, Instituto de Ciencia y Tecnología de Polímeros, CSIC, Madrid, Spain, 2001-2005.
- Associate Professor of Radiology, Harvard Medical School, Boston, Massachusetts, USA, 1995-2002.
- Associate Director of NMR Core, Department of Radiology, Massachusetts General Hospital, Boston, Massachusetts, USA, 1995-2000.
- Director of High Field NMR, Department of Radiology, Massachusetts General Hospital, Boston, Massachusetts, USA, 1990-2000.
- Assistant Professor of Radiology, Harvard Medical School, Boston, Massachusetts, USA, 1992-1995.
- Instructor of Radiology, Harvard Medical School, Boston, Massachusetts, USA, 1988-1992.
- Research Fellow in Radiology, Department of Radiology, Massachusetts General Hospital and Harvard Medical School, Boston, Massachusetts, USA, 1986-1988.
- Head of Laboratory of I+D and QA, Coexpan S.A., San Fernando de Henares, Spain, 1984-1986.
- Postdoctoral Fellow, Department of Chemistry, University of Cincinnati, Cincinnati, Ohio, USA, 1982-1984.

4. PUBLICATIONS

(Total number of publications: over 110, and communications to scientific meetings: over 150).

Recent publications (last five years):

1. Garrido L, López-González M, Sainz E, Riande E. Molecular basis of carbon dioxide transport in polycarbonate membranes. *J Phys Chem B* 2008;112:4253-4260.
2. Garrido L, Sampayo J. Stray-field nuclear magnetic resonance imaging in microgravity conditions. *J Appl Phys* 2008;103:056105.
3. Collar EP, García-Martínez JM, Garrido L. Characterization of morphology in chemically modified styrene-*b*-(ethylene-co-butylene)-*b*-styrene by solid state nuclear magnetic resonance. *J Appl Polym Sci* 2008;107:2656-2664.
4. García O, Garrido L, Sastre R, Costela A, García-Moreno I. Synthetic strategies on hybrid materials improving properties for optoelectronic applications. *Adv Funct Mater* 2008;18:2017-2025.
5. Ramos Riesco M, Martínez Casado FJ, López-Andrés S, García Pérez MV, Redondo Yélamos MI, Torres MR, Garrido L, Rodríguez Cheda JA. Monotropic polymorphism in copper(II) decanoate. *Cryst Growth Des* 2008;8:2547-2554.
6. Martínez Casado FJ, Ramos Riesco M, Sánchez Arenas A, García Pérez MV, Redondo MI, López-Andrés S, Garrido L, Cheda JA. A novel rotator glass in lead(II) pentanoate: calorimetric and spectroscopic study. *J Phys Chem B* 2008;112:16601-16609.

7. Garrido L, Pozuelo J, López-González M, Fang J, Riande E. Simulation and experimental Studies on proton diffusion in polyelectrolytes based on sulfonated naphthalenic copolyimides. *Macromolecules* 2009;42:6572-6580.
8. Sastre R, Martín V, Garrido L, Chiara JL, Trastoy B, García O, Costela A, García-Moreno I. Dye-doped polyhedral oligomeric silsesquioxane (POSS)-modified polymeric matrices for highly efficient and photostable solid-state lasers. *Adv Funct Mater* 2009;19:3307-3316.
9. Garrido L, Sampayo J. Proton magnetic resonance imaging of specimens in simulated microgravity. *Microgravity Sci Tech* 2009;21:305-310.
10. García-Álvarez I, Garrido L, Doncel-Pérez E, Nieto-Sampedro M, Fernández-Mayoralas A. Detection of metabolite changes in C6 glioma cells cultured with antimitotic oleyl glycoside by ¹H MAS NMR. *J Med Chem* 2009;52:1263-1267 [Correction *J Med Chem* 2010;53:921].
11. Díaz K, Garrido L, López-González M, del Castillo LF, Riande E. CO₂ Transport in Polysulfone Membranes Containing Zeolitic Imidazolate Frameworks as Determined by Permeation and PFG NMR Techniques. *Macromolecules* 2010;43:316-325.
12. Garrido L, López-González M, Riande E. Influence of local chain dynamics on diffusion of gases in polymers as determined by pulsed field gradient NMR. *J Polym Sci Part B Polym Phys* 2010;48:231-235.
13. Bouhelal S, Cagiao ME, Bartolotta A, Di Marco G, Garrido L, Benachour D, Baltá Calleja FJ. On polyethylene chain generation through chemical crosslinking of isotactic polypropylene. *J Appl Polym Sci* 2010;116:394-403.
14. Garrido L. Magnetic orientation of diamagnetic amorphous polymers. *J Polym Sci Part B Polym Phys* 2010;48:1009-1015.
15. Garrido L, Jiménez I, Ellis G, Cano P, García-Martínez JM, López L, de la Peña E. Characterization of surface modified polyalkanoate films for biomedical applications. *J Appl Polym Sci* 2011;119:3286-3296.
16. García-Álvarez I, Fernández-Mayoralas A, Garrido L. Effect of drugs in cells and tissues by NMR spectroscopy. *Current Topics Med Chem* 2011;11:27-42.
17. Medel S, García JM, Garrido L, Quijada-Garrido I, París R. Thermo- and pH-responsive gradient and block copolymers based on 2-(2-methoxyethoxy)ethyl methacrylate synthesized via ATRP and the formation of thermo-responsive surfaces. *J Polym Sci Part A Polym Chem* 2011;49:690-700.
18. Ellis G, Cano P, Jadraque M, Martín M, López L, Núñez T, de la Peña E, Marco C, Garrido L. Laser microperforated biodegradable microbial polyhydroxyalkanoate substrates for tissue repair strategies. An infrared microspectroscopy study. *Anal Bioanal Chem* 2011;399:2379-2388.
19. García C, López-González M, de Abajo J, Garrido L, Guzmán J. Effects of tricresylphosphate on gas transport coefficients in Matrimid and 6FDA-TMPD polyimides. *Macromolecules* 2011;44:3862-3873.
20. Garrido L, López-González M, Tlenkopatchev M, Riande E. Proton diffusion in polyelectrolytes based on hydrogenated polynorbornenes with imide side groups in the repeat unit as determined by NMR and impedance spectroscopies. *J Membr Sci* 2011;380:199-207.
21. Doyagüez EG, Corrales G, Garrido L, Rodríguez J, Gallardo A, Fernández-Mayoralas A. Linear copolymers of proline methacrylate and styrene as catalysts for aldol reactions in water: effect of the copolymer aggregation on the enantioselectivity. *Macromolecules* 2011;44:6268-6276.
22. García-García JM, López L, Paris R, Núñez-López MT, Quijada-Garrido I, de la Peña Zarzuelo E, Garrido L. Surface modification of poly(3-hydroxybutyrate-co-3-hydroxyvalerate) copolymer films for promoting interaction with bladder urothelial cells. *J Biomed Mater Res Part A* 2012;100:7-17.
23. García-Aparicio C, Garrido L, Quijada-Garrido I. Diffusion of small molecules in a chitosan/water gel determined by proton localized NMR spectroscopy. *J Colloid Interface Sci.* 2012;368:14-20.
24. Guzmán J, Garrido L. Determination of carbon dioxide transport coefficients in liquids and polymers by NMR spectroscopy. *J Phys Chem B* 2012; 116:6050-6058.

5. CURRENT FUNDING

(Total number of projects as PI: 11, and number of projects participated: 21)

Project	Source, reference	Period
Bioengineered multicomponent neuroactive systems for axonal regeneration in spinal cord injury	Fondo de Investigación Sanitario, Ministerio de Ciencia e Innovación; FIS P111/01436	2012-2014
Synthesis of mimetic glycopolymers of heparan sulfate and chondroitin sulfate for stem cell therapies applied to spinal cord injury	Fundación MAPFRE	2012

6. RESEARCH INTEREST

- Nuclear magnetic resonance spectroscopy and imaging applied to material science and biomedicine.
- Development of biodegradable scaffolds for tissue regeneration and cell therapy.