



**UNIVERSIDAD CARLOS III DE MADRID**

**TESIS DOCTORAL**

**MODIFICACIÓN SUPERFICIAL DE  
MATERIALES POLIMÉRICOS MEDIANTE  
FUENTES DE PLASMA FRÍO**

**Autora**

**Noemí Encinas García**

**Directores**

**Dr. Miguel Ángel Martínez Casanova**

**Dra. Juana Abenojar Buendia**

**Departamento de Ciencia e Ingeniería de Materiales e Ingeniería Química**

**Leganés, 28 de Septiembre de 2012**

**Publicación I:**

N. Encinas, M. Pantoja, J. Abenojar, M.A. Martínez. *Control of wettability of polymers by surface roughness modification*. Journal of Adhesion Science and Technology, 24:11-12 (2010), pp. 1869-1883

URI: <http://hdl.handle.net/10016/22989>

**Publicación II:**

N. Encinas, B. Díaz-Benito, J. Abenojar, M.A. Martínez. *Extreme durability of wettability changes on polyolefin surfaces by atmospheric pressure plasma torch*. Surface & coatings technology, 205 (2010), pp. 396-402

URI: <http://hdl.handle.net/10016/22992>

**Publicación III:**

B. Díaz-Benito, F. Velasco, F.J. Martínez, N. Encinas. *Hydrolysis study of bis-1,2-(triethoxysilyl)ethane silane by NMR*. Colloids and surfaces A: physicochemical and engineering aspects, 369:1-3, (2010), pp. 53-56

URI: <http://hdl.handle.net/10016/22994>

**Publicación IV:**

N. Encinas, M. Pantoja, M. Torres-Remiro, and M.A. Martínez. *Approaches to poly(tetrafluoroethylene) adhesive bonding*, Presented in part at the 4th International Conference on Advanced Computational Engineering and Experimenting (ACE-X 2010), Paris, France, 8 9 July 2010. The journal of adhesion, 87:7-8 (2011), pp. 709-719

URI: <http://hdl.handle.net/10016/23000>

**Publicación V:**

M. Pantoja, M. A. Martínez, J. Abenojar, N. Encinas and Y. Ballesteros. *Effect of EtOH/H<sub>2</sub>O ratio and pH on bis-sulfur silane solutions for electrogalvanized steel joints based on anaerobic adhesives*, Presented in part at the 4th International Conference on Advanced Computational Engineering and Experimenting (ACE-X 2010), Paris, France, 8 9 July 2010. The journal of adhesion, 87:7-8 (2011), pp. 688-708

URI: <http://hdl.handle.net/10016/23046>

**Publicación VI:**

N. Encinas, J. Abenojar, M.A. Martínez. *Development of improved polypropylene adhesive bonding by abrasion and atmospheric plasma surface modifications*. International Journal of adhesion & adhesives, 33 (2012), pp. 1-6

URI: <http://hdl.handle.net/10016/23082>

**Publicación VII:**

N. Encinas, R.G. Dillingham, B.R. Oakley, J. Abenojar, M.A. Martínez, and M. Pantoja. *Atmospheric pressure plasma hydrophilic modification of a silicone surface*, Presented in part at the 1st International Conference on Structural Adhesive Bonding (AB2011), Porto, Portugal, 7-8 July 2011. The journal of adhesion, 88:4-6 (2012), pp. 321-336

URI: <http://hdl.handle.net/10016/23090>