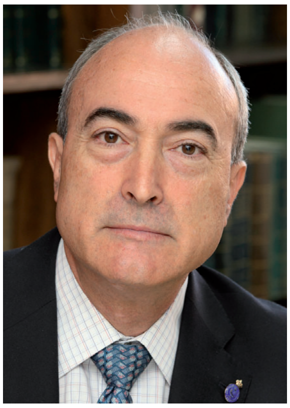

N. Martín

The author presented on this page has recently published his ***25th article*** *since 2000 in Angewandte Chemie:* "Electron Transfer in a Supramolecular Associate of a Fullerene Fragment": M. Gallego, J. Calbo, J. Aragó, R. M. Krick Calderon, F. H. Liquido, T. Iwamoto, A. K. Greene, E. A. Jackson, E. M. Pérez, E. Ortí, D. M. Guldi, L. T. Scott, N. Martín, *Angew. Chem.* **2014**, *126*, 2202–2207; *Angew. Chem. Int. Ed.* **2014**, *53*, 2170–2175.

Nazario Martín

Date of birth:	March 25, 1956
Position:	Professor of Chemistry, Universidad Complutense de Madrid, Vice-Director of IMDEA Nanoscience, and Past President of the Real Sociedad Española de Química (RSEQ)
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Education:	1978 MS, Universidad Complutense de Madrid 1984 PhD with Prof. Carlos Seoane, Universidad Complutense de Madrid 1987–1988 Postdoctoral fellow with Prof. Michael Hanack, University of Tübingen (Germany)
Awards:	**2007** DuPont Prize for Science; **2012** Gold Medal and Research Award of the RSEQ; **2012** Rey Jaime I Prize in Basic Research; **2012** EUCheMS Lecture Award; **2012** Honorary doctorate, Universidad de La Havana; **2013** Alexander von Humboldt Award; **2013** Richard E. Smalley Research Award (The Electrochemical Society)
Current research interests:	Molecular and supramolecular chemistry of carbon nanostructures such as fullerenes, carbon nanotubes and graphene, π-conjugated systems such as molecular wires and electroactive molecules, in the context of electron transfer processes, photovoltaic applications, and nanoscience
Hobbies:	Sports, reading

My biggest motivation is … the best is yet to come!

If I were not a scientist, I would be … a writer or actor—or maybe a bishop.

My greatest achievement has been … to form a group of young scientists and celebrate with them when we reach a new challenge.

Guaranteed to make me laugh is … socializing with friends.

The best advice I have ever been given is … "Never leave that till tomorrow which you can do today" (Benjamin Franklin).

I can never resist … chocolate, a top football match, and/or having a look at top chemistry journals.

I would have liked to have discovered … fullerenes—and also the concept of aromaticity.

When I'm frustrated, I … work harder.

My favorite author (fiction) is … Jules Verne.

My top three films of all time are … *Ben Hur*, *The Godfather*, and *Life is Beautiful* (*La vita è bella*).

The most significant scientific advance of the last 100 years has been … the Haber–Bosch process.

The biggest problem that scientists face is … to supply energy in a sustainable way.

My favorite piece of research is … transforming light into electricity and vice versa. It's simply fantastic!

The most important thing I learned from my parents is … studying to become better.

If I could have dinner with three famous scientists from history, they would be … Leonardo da Vinci, Friedrich August Kekulé, and Richard Feynman.

And I would ask them … probably all the same questions I have responded to here.

I chose chemistry as a career because … from the very beginning, it was a challenge for me to know about the nature of things.

My best investment was … the money I spent on books.

My secret/not-so-secret passion is … chemistry.

My most exciting discovery to date has been … manipulating and modifying carbon nanostructures either with supramolecular motifs or chiral elements.

Has your approach to publishing your results changed since the start of your career?

Sure. At the beginning of your career, your main purpose is looking for new results, regardless of where they are coming from. At this first stage, you try to publish as much as possible. However, when you have reached a mature stage, your interest shifts to the quality of the scientific challenges you face. From a personal point of view, nowadays my strongest motivation is being able to gather cutting-edge scientific results in the forefront of chemistry. Publishing in top journals is highly encouraging and rewarding as many colleagues will read your results. However, what I really like is face-to-face discussion with my colleagues about a whole story based on our scientific results.

What do you think the future holds for your field of research?

From the first excitement of fullerenes, I have watched the enthusiasm stemming from other carbon nanostructures, namely carbon nanotubes and, more recently, graphene. I certainly believe that these carbon nanoforms have not yet reached the degree of development they should have for practical purposes. Applications in photovoltaics, for instance, could eventually lead to efficient devices. Furthermore, there is still a lot of room for efficiently controlling the chemical reactivity of these carbon allotropes. For example, I foresee an exciting future for metal and organocatalysis as well as for the synthesis of chiral fullerenes. These new carbon-based materials should lead to better performances with new properties where imagination will be the only limit for the chemist.

My 5 top papers:

1. "Exceptionally Small Attenuation Factors in Molecular Wires": F. Giacalone, J. L. Segura, N. Martín, D. M. Guldi, *J. Am. Chem. Soc.* **2004**, *126*, 5340–5341.
   The potential of molecular-sized materials for electronic and photonic applications has led to an ever-increasing interest in developing and probing molecular-scale wires. π-Conjugated oligomers, such as oligo(*p*-phenylenevinylenes) (oligo-PPVs), are among those molecules that act as efficient molecular wires. This paper revealed the lowest known attenuation factor (β value) for a series of oligo-PPVs.
2. "Retro-Cycloaddition Reaction of Pyrrolidinofullerenes": N. Martín, M. Altable, S. Filippone, A. Martín-Domenech, L. Echegoyen, C. M. Cardona, *Angew. Chem.* **2006**, *118*, 116–120; *Angew. Chem. Int. Ed.* **2006**, *45*, 110–114.
   The 1,3-dipolar cycloaddition reaction of azomethine ylides has been successfully conducted with fullerenes and it is considered one of the most straightforward procedures for their functionalization. In this paper, we described the first highly efficient retrocycloaddition reactions with pyrrolidinofullerenes to quantitatively afford the parent pristine fullerene, thus paving the way to a new protection–deprotection protocol and to catalytic studies on fullerenes in our group.
3. "exTTF as a Building Block for Fullerene Receptors. Unexpected Solvent-Dependent Positive Homotropic Cooperativity": E. M. Pérez, L. Sánchez, G. Fernández, N. Martín, *J. Am. Chem. Soc.* **2006**, *128*, 7172–7173.
   Despite its suggestive curved shape, exTTF had never been used as a building block in supramolecular chemistry. In this paper we reported the first exTTF-based receptor for fullerenes. This is a seminal work in our group since it reports for the first time a rather simple and easily to prepare molecular tweezers formed from two exTTF units, which efficiently recognizes fullerenes.
4. "An efficient approach to chiral fullerene derivatives by catalytic enantioselective 1,3-dipolar cycloadditions": S. Filippone, E. E. Maroto, A. Martín-Domenech, M. Suarez, N. Martín, *Nature Chem.* **2009**, *1*, 578–582.
   Fullerene chirality is an important but undeveloped issue. Previously, enantiopure fullerene derivatives had been made from chiral starting materials or obtained by separating racemic mixtures. In this work, we reported the first enantioselective catalytic synthesis of chiral pyrrolidinofullerenes. This procedure has proven to be quite general, affording enantiomeric excesses of greater than 90%.
5. "Asymmetric Organocatalysis in Fullerenes Chemistry: Enantioselective Phosphine-catalyzed Cycloaddition of Allenoates onto C_{60}": J. Marco-Martinez, V. Marcos, S. Reboredo, S. Filippone, N. Martín, *Angew. Chem.* **2013**, *125*, 5219–5223; *Angew. Chem. Int. Ed.* **2013**, *52*, 5115–5119.
   Organocatalysis has boosted the interest in organic synthesis as an efficient strategy for the construction of chiral molecules by the use of metal-free chiral catalysts. In this communication, we reported on the first organocatalytic cycloaddition onto fullerenes affording chiral cyclopenteno[60]fullerene derivatives in remarkably high enantiomeric excesses. In this process, easily available chiral phosphines were employed as nucleophilic organocatalyst to promote a formal [3+2] stereoconvergent cycloaddition of racemic α-allenoates onto C_{60}.

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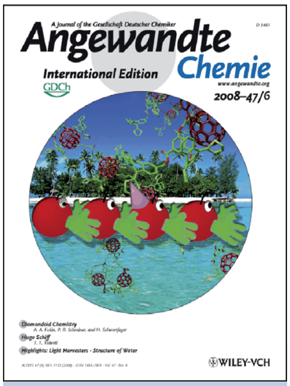

The work of N. Martín has been featured on the cover of Angewandte Chemie: "Self-Organization of Electroactive Materials: A Head-to-Tail Donor–Acceptor Supramolecular Polymer": G. Fernández, E. M. Pérez, L. Sánchez, N. Martín, *Angew. Chem.* **2008**, *120*, 1110–1113; *Angew. Chem. Int. Ed.* **2008**, *47*, 1094–1097.