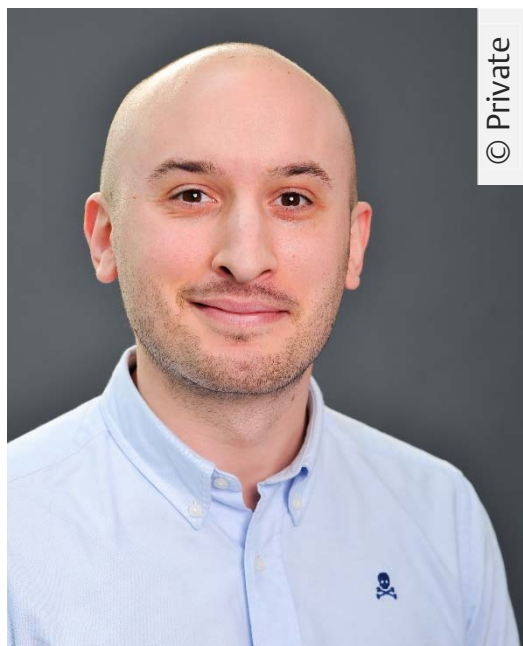


Meet Prof. Manuel Plaza, Thieme Chemistry Journals Awardee 2024!



Prof. Manuel Plaza is a Ramón y Cajal Assistant Professor at the Universidad de Oviedo (Spain) since early 2024. He obtained his PhD in 2018 from the same university, then pursued postdoctoral studies at the Technische Universität München (Germany) until the end of 2021. In 2022, he began his independent career as Margarita Salas Junior Researcher at the Universidad de Oviedo.

Thieme: Which field of organic chemistry are you interested in the most and why?

Prof. Plaza: My keen interest in organic chemistry, particularly in the field of photochemistry, stems from my formative experiences during my postdoctoral research under the mentorship of Prof. Thorsten Bach, a renowned expert in this domain. Inspired by the groundbreaking work in his group, I was driven to embark on my independent academic career with a focus on exploring the transformative potential of organic reactions initiated by visible light. Photochemistry, in my view, offers a distinctive avenue for organic chemists to transcend traditional thermal approaches, tapping into the transiently generated excited states of molecules. This opens up a realm of possibilities for synthesizing complex molecular architectures and accessing novel chemical space, thereby pushing the boundaries of organic synthesis to new frontiers. Moreover, the inherent characteristics of photochemical reactions offer distinct advantages that further fuel my fascination with this field. Unlike conventional thermal processes, photochemistry can be conducted under mild conditions, minimizing the need for harsh reagents and promoting environmentally sustainable practices. Additionally, the simplicity and affordability of the required equipment makes photochemistry accessible to a wide range of researchers, democratizing access to this powerful tool for innovation in organic synthesis.

Thieme: Following that, what is the focus of your current research activity?

Prof. Plaza: I am currently involved in the development of photochemical reactions which rely on the activation of halogen-bonding complexes, a family of electron-donor-acceptor complexes. These radical-based transformations provide a previously unexplored, simple access to highly reactive alkenyl and dienyl radicals, which engage in different C–X and C–C bond forming reactions. Our research is focused not only on the implementation of this unique reactivity to construct high-added-value molecules, but also in the exploration of the mechanisms of these reactions. In addition to our work with halogen-bonding complexes, I oversee other research lines dedicated to exploring novel photochemical reactions utilizing carbene precursors such as acylsilanes and *N*-tosylhydrazones. These complementary efforts broaden the scope of our research portfolio and contribute to the advancement of photochemistry as a whole.

Thieme: What do you think about the modern role and prospects of organic chemistry?

Prof. Plaza: I believe the modern role and prospects of organic chemistry are incredibly promising and dynamic. Organic chemistry serves as the cornerstone of many scientific disciplines like drug discovery, materials science, agrochemistry, and sustainable energy solutions, among others. I think the growing emphasis on green chemistry and sustainable practices underscores the evolving role of organic chemistry in promoting the development of greener synthetic methodologies and designing environmentally benign processes. Thanks to this, organic chemists are driving the transition towards a more sustainable and eco-friendly future.

Thieme: Which difficulties are there for young upcoming chemists in your field? Do you have any tips?

Prof. Plaza: As a young chemist embarking on an independent academic career in Spain, navigating the landscape of funding presents a significant challenge. Securing resources for research endeavors and the ability to recruit PhD students are primary challenges I encounter. Fortunately, this year I have been awarded with a Ramón y Cajal grant, providing a foundational support. However, to sustain and expand my research, I must actively pursue additional funding opportunities through the Spanish *Agencia Estatal de Investigación* and the *European Research Council*. I believe persistence, networking, and a proactive approach in seeking out grants and collaborations are essential strategies for young chemists navigating this competitive environment.

Thieme: What is your most important scientific achievement to date and why?

Prof. Plaza: To date, I think my most significant scientific achievement revolves around the establishment of an independent research line within my department at the University of Oviedo. This milestone not only symbolizes the realization of a long-held aspiration, but also represents an important step towards my academic career progression. Moreover, securing this year the prestigious Ramón y Cajal grant stands out as a crowning achievement within this research journey. Finally, I take immense pride in the accomplishments stemming from this research line, particularly through the commendable efforts of Helena, my first PhD student. The milestones we have achieved so far together fill me with a sense of fulfillment and reinforce the merit behind receiving the recognition of the Thieme Chemistry Journals Award 2024.

Thieme: Could you tell us something about yourself outside the lab, such as your hobbies or extra-work interests?

Prof. Plaza: During my time pursuing my bachelor's and master's degrees in chemistry at the University of Oviedo, I balanced my academic duties with a passion for professional handball. This experience installed in me invaluable qualities such as discipline and sacrifice, which have undoubtedly contributed to my growth both in and out of the laboratory. While I do not compete professionally anymore, I still find joy in occasional friendly handball matches with friends. However, my primary extracurricular interests now include maintaining a healthy lifestyle through activities like going to the gym and hiking. Beyond physical activities, I have a deep appreciation for exploration and adventure. Traveling abroad allows me to immerse myself in diverse cultures, broaden my perspectives, and forge meaningful connections with people from all walks of life.
