Meet Prof. Francesco Zinna, Thieme Chemistry Journals Awardee 2025!

© Private

Prof. Francesco Zinna *is an associate professor at the University of Pisa (Italy). After a master's degree focused on organic chemistry, he obtained a PhD in chemistry and materials science at the University of Pisa in 2016, followed by a postdoctoral period at the University of Geneva (Switzerland). In 2018, he returned to Pisa as an assistant professor, and in 2024 was promoted to his current position.*

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

Prof. Zinna: Since my PhD, I have been interested in chiral functional compounds for their chiroptical properties, that is their ability to interact with circularly polarized light giving strong circular dichroism and circularly polarized luminescence.

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

Prof. Zinna: At the moment, I am still working on chiral materials: design and synthesis of chiral ligands for the preparation of coordination compounds and synthesis of conjugated chiral organic compounds undergoing stereo-ordered supramolecular self-aggregation. We study their optical and chiroptical properties to find structure–function correlations and achieve performances suitable to employing these materials in electronic devices.

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

Prof. Zinna: A more precise understanding of property–structure relations allows chemists to "synthesize functions", that is to target the synthetic efforts towards the compound(s) with the required properties. This may be further enabled nowadays by AI and machine-learning tools.

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

Prof. Zinna: I think the main issues facing young upcoming chemists are mostly the problems affecting academia in general, in particular the lack of concrete opportunities for permanent positions, forcing talented scientists to leave. Even those who succeed in securing a permanent position are then often overwhelmed by competition for limited funds and bureaucratic tasks. In such a situation, it may be sometimes not easy to maintain motivation and be creative.

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

Prof. Zinna: We pioneered the use of chiral coordination complexes in circularly polarized (CP) OLEDs achieving very high polarization degree. Moreover, we proposed a new metric to quantify the efficiency of CP luminescence emitters, which is nowadays used as a guide to target (organic) molecules in the quest for efficient CP emitters.

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

Prof. Zinna: Reading about the most diverse topics possible. Baroque music.