

Dr. Alessandro Sorrenti

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Alessandro Sorrenti is a Senior Researcher (Oberassistent) at the Swiss Federal Institute of Technology, ETH-Zurich (Switzerland), working in the group of Dr. Puigmartí-Luis (part of deMello group) since 2017. He received his PhD in Chemistry from the University of Rome “La Sapienza” in 2008, with a dissertation entitled “*Transfer of chirality from molecules to complex systems*” (supervisor Dr. G. Mancini). After a short stay in the group of G. Savelli (University of Perugia), in 2010, he moved to the University of Barcelona, where he joined the group of Prof. J. M. Ribó (2010-2011) thanks to a postdoctoral fellowship from the Spanish Government. In Barcelona, he also worked as postdoctoral researcher in the groups of Prof. R. M. Ortuño at the Universitat Autònoma de Barcelona (2011-2013), and of Prof. D. Amabilino (2013-2014) at the CSIC Institute of Materials Science. In 2014, driven by his interest in non-equilibrium self-assembly, he joined the Laboratory of Nonequilibrium Complex Systems lead by Dr. T. Hermans at the Institut de Science et d’Ingénierie Supramoléculaires of Strasbourg (2014-2017). There he won a Marie Skłodowska-Curie Individual Fellowship for the research project ASSEMZYME: “*Continuous self-assembly using enzyme mediated supramolecular switching*” (score 98/100, ranked 2nd by the chemistry panel).

Dr. Sorrenti’s research experience is at the interface between supramolecular, organic, physical-organic and colloid chemistry. Namely, his interests have ranged from the investigation of chirality in amphiphile and porphyrin assemblies, to the study of kinetically controlled self-assembly and pathway complexity in aqueous media, and of enzyme mediated dissipative supramolecular polymerization. Currently, at ETH Zurich, his research interest is focused on studying non-covalent synthesis of functional materials under biomimetic non-equilibrium conditions generated within microfluidic environments.

His research has resulted in significant contributions to the fields of equilibrium and non-equilibrium self-assembly (both kinetically controlled and dissipative). As an example, his MSC investigation demonstrated that it is possible to obtain sustained non-equilibrium steady-states of artificial supramolecular polymers by continuous influx of a chemical fuel and outflux of waste products, which was a major breakthrough in the field (*Nat. Commun.* **2017**, *8*, 15899). He is co-author of **37** publications in international peer-reviewed journals, including *J. Am. Chem. Soc.*, *Nat. Commun. Chem. Sci.*, *Chem. Comm.*, *Chem. Eur. J.*, *J. Mater. Chem. C*, *Langmuir*, *CrystEngComm*, with h-index **15**, and he is co-inventor of two patents.