

## CV

Silvia Marchesan completed her M. Sci. in medicinal chemistry with honours under the supervision of Prof. M. Prato and Dr. T. Da Ros at The University of Trieste (Italy) in 2004, with a research project on the synthesis and purification of fulleropyrrolidine bis- and tris-adducts for potential biological applications as enzyme inhibitors. She was awarded a PhD in chemistry at The University of Edinburgh in 2008, where her studies focussed on the chemoenzymatic synthesis of GDP-azidomannose derivatives for glycoprotein bio-orthogonal modification, under the supervision of Dr. D. Macmillan. In 2006 she was awarded the national qualification as Pharmacist (Italy), and in 2007 as Pharmaceutical Chemist (UK). In 2008-2010 she studied integrin protein biochemical pathways in leucocyte adhesion and migration, thanks to an Academy of Finland fellowship under the supervision of Prof. C. G. Gahmberg at the University of Helsinki. In 2010-2012 she continued her postdoctoral research as joint fellow between Monash University (supervised by Prof. J. S. Forsythe) and the Commonwealth Scientific and Industrial Research Organization (CSIRO, Australia's national science agency, supervised by Dr. P. Hartley and Dr. K. M. McLean). In Australia she found a multidisciplinary environment within the field of nanostructured biomaterials for regenerative medicine that allowed her to combine her chemistry and biology expertise and acquire new skills within materials science and nanotechnology.

In 2013 she returned to Italy to work on a EU-funded project on nanomaterials for photocatalysis under the supervision of Prof. M. Prato at the Center of Excellence for Nanostructured Materials at the Unit of INSTM (Inter-University Consortium for Science and Technology of Materials) located within the University of Trieste, in the Chemical and Pharmaceutical Dept. In 2015 she could set-up her own lab at the same institution thanks to a personal starting grant by the Italian Ministry of Education and Research (MIUR) to work on self-assembling heterochiral tripeptides for biological applications. The same year, she was awarded a tenure-track position as assistant professor in the same department, followed by tenure as associate professor in organic chemistry in 2018. Since 2017 she has joined the Dept. Head's Office as Research Delegate. In 2017, SM was awarded the Vittorio Erspamer Medal by the Italian Peptide Society for her research on self-assembling heterochiral peptides. In 2018 she was awarded the JSP fellowship to attend the Buergerstock Stereochemistry conference (Switzerland) and she was listed by Nature Index amongst the top-ten Rising Stars in the natural sciences worldwide for her multidisciplinary and international research with impact. In 2019 she was selected by Nature Chemistry amongst the scientific profiles to describe the future of chemistry for the 10<sup>th</sup> anniversary special issue of the journal. Her research activities focus on the use of nanotechnology to investigate functional materials for a variety of applications, especially in aqueous environments ([www.marchesanlab.com](http://www.marchesanlab.com)). Her two main research areas regard composites and hybrids that feature carbon nanostructures, and supramolecular systems based on short peptides.