

Brief biography of Prof. Maria Letizia Focarete, PhD

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Maria Letizia Focarete is Associate Professor (Science and Technology of Polymeric Materials) at the University of Bologna. She leads the Research Group in Polymer Science at the Department of Chemistry "G. Ciamician, which currently includes one assistant professor, four post-docs, two PhD students and several master and bachelor students as well as Erasmus students. She is also strongly involved in activities related to biomaterials at the Health Sciences and Technologies - Interdepartmental Center for Industrial Research (HST-ICIR) at the University of Bologna.

M.L.F. founded in 2006 an interdisciplinary research group on electrospinning at the University of Bologna (RGE-UniBo). RGE

activities are mostly focused on: extending basic current knowledge for better control and optimization of the electrospinning process, implementing and tailoring the new apparatus for specific requirements and for mass production, as well as fabricating innovative engineered nanofiber assemblies from selected polymers.

Her academic research interests are focused on polymeric materials and related processing technologies, for advanced biomedical and energy applications. In particular, her main scientific interest regards biomaterials and biomimetic nanostructured materials for tissue regeneration and drug delivery.

Group know-how include: (i) the study of structure-property relationships in natural and synthetic polymers, copolymers and polymer blends to design new materials with physical properties aimed to specific applications; (ii) surface functionalization and surface characterization of polymeric materials mainly pointing at biomedical applications; (iii) use of the electrospinning technology to produce innovative nanostructures with a focus on the interaction between cold atmospheric pressure non-equilibrium plasmas and the electrospinning process.

Technology transfer is also performed, and the electrospinning technology developed in the group are now the focus of a start-up company, where M.L.F. is member of the Scientific Advisory Board.

M.L.F. is author of around 75 publications in international peer reviewed Journals, 3 book chapters, 2 Italian patents, 4 PCT patents and more than 100 contributions to national and international conferences