

**João F. Mano - SHORT CV**  
**March 2023**

João F. Mano, PhD in Chemistry (1996, Technical Univ. Lisbon), D.Sc. in Tissue Engineering Regenerative Medicine and Stem Cells (2012, Univ. Minho), is a full professor at the Department of Chemistry of the University of Aveiro (Portugal). During his career he has been teaching courses related to biomaterials/polymer science and technology, and tissue engineering, in both undergraduate and graduate levels. He is the director of the Doctoral Program on Biotechnology at the Univ. of Aveiro. He has also an appointment as Invited Professor (classe exceptionnelle, since 2014) at University of Lorraine (France), and Visiting Professor in KAIST (South Korea) - 2019 and Adjunct Professor at Ajou University (South Korea) since 2020.

Since 2022 he is a vice-director at CICECO – Aveiro Institute of Materials, where he is directing the *COMPASS Research Group*, founded in April 2016. His research focuses on the application of advanced biomaterials and cells to advance multidisciplinary concepts in the field of regenerative and personalized medicine. Specifically, he utilizes biomimetic and nano/micro-technology approaches to develop polymer-based biomaterials and surfaces for the creation of biomedical devices with enhanced structural and multi-functional properties. He also engineers microenvironments to regulate cell behavior and organization, with the goal of clinically applying these technologies in advanced therapies and drug screening, or in the bioengineering of disease models.

João F. Mano is author of 740+ original research or review papers in international journals (36000+ citations,  $h=95$  – Web of Science) and 40+ book chapters. João F. Mano co-edited 9 special issues in international journals and 5 books. João F. Mano has been invited to review manuscripts from 340+ different international journals and to routinely evaluate projects from numerous private and state funding agencies from 19 different countries. He was the LS9 panel chair for the peer review ERC Advanced Grants (2020-2023). João F. Mano supervised or co-supervised 74+ MSc, 26 PhD students, and 40+ post-doctoral fellows. He filed 12 patents (8 as senior inventor). João F. Mano is the co-founder and chairman of: METATISSUE (2018), a company developing human-derived hydrogels for 3D cells culture (5 prizes and owner of two patents); and CELLULARIS Biomodels (2021), a company offering services for cell-based disease models (1 prize and 1 patent).

He is the Editor-in-Chief of *Materials Today Bio* (Elsevier). He has been also part of a series of scientific societies and editorial boards of 12 international journals. He has been coordinating or involved in many national and European research projects and participated in the organization of scientific events in the area of polymer/materials science and biomaterials/tissue engineering.

Professor João F. Mano has been member of scientific committees, organizing committees, referee and chairman in different international meetings. He was invited to present more than 120 invited/keynote/plenary talks in international conferences including EUROMAT, ESTAC, TERMIS (EU and AP chapters and World conferences), BIOMED, FBPS, NANOMED, COLAOB, ESB, SFB, World Biomaterials Conference, E-MRS, ESAO, EPF, ACS, CBECIMAT, NICE, Inter. HYMA, APME, APCChE, PPM, EPNOE, SELECTBIO, EFB, CRS, ECMNP, PAT, Biolberoamerica, RRB, ScSB, EuChemS, BPP.

João F. Mano has received different honours and awards: (i) fellow of the IUPAC (International Union of Pure and Applied Chemistry) since 2004; (ii) the Stimulus to Excellence Award by the Portuguese Minister for Science and Technology in 2005; (iii) the Materials Science and Technology Prize, attributed by the Federation of European Materials Societies (FEMS) in 2007 (iv) UNESCO Chair on Biomaterials attributed in 2008 from the University of Havana (Cuba); (v) the major BES innovation award in 2010 (at that time, one of the most recognised innovation prize in Portugal); (vi) recipient an Advanced Grant from the European Research Council (ERC-AdG), in 2015; (vii) received the title of Professor@Lorraine from the University of Lorraine, France, in 2018; (viii) recipient a Proof of Concept Grant from the European Research Council (ERC-PoC), in 2018; (ix) received the title of Doctor Honoris Causa, given by University of Lorraine, in 2019; (x) awarded with a Gutenberg Chair, supported by the Great East Region of France, in 2020; (xi) recipient a second ERC-AdG, in 2020; (xii) recipient a second ERC-PoC, in 2020; (xiii) elected fellow of the European Academy of Sciences (FEurASc); (xiv) Bluepharma | University of Coimbra Innovation Award 2019; (xv) Inducted Fellow Biomaterials Science and Engineering (FBSE) in 2020; (xvi) Researcher Award University of Aveiro 2020 (first edition); (xvii) George Winter Award 2020: European Society for Biomaterials. (xviii) Madinaveitia-Lourenço Prize, from the Spanish Royal Society of Chemistry, 2021. (xix) elected fellow of the American Institute of Medical and Biological Engineering (FAIMBE), 2022; (xx) received the title of Doctor Honoris Causa, given by University of Utrecht, in 2022.

## Representative publications:

- 1- S.C. Santos, C.A. Custódio, J.F. Mano - Photopolymerizable platelet lysate hydrogels for customizable 3D cell culture platforms. *Advanced Healthcare Materials*, 7, 1800849 (2018).
- 2- L.F. Santos, A.S. Silva, C.R. Correia, J.F. Mano - Physical immobilization of particles inspired by pollination. *Proceedings of the National Academy of Sciences (USA)*, 116(12), 5405 (2019).
- 3- A.R. Sousa, C.M. Cruz, M.B. Oliveira, J.F. Mano - One-step rapid fabrication of cell-only living fibers. *Advanced Materials*, 32(2), 1906305 (2020).
- 4- A.S. Silva, L.F. Santos, M.C. Mendes, J.F. Mano - Multi-layer pre-vascularized magnetic cell sheets for bone regeneration. *Biomaterials* 231, 1196648 (2020).
- 5- C.F. Monteiro, S.C. Santos, C.A. Custódio, J.F. Mano – Human platelet lysates-based hydrogels: a novel personalized 3D platform for spheroid invasion assessment. *Advanced Science* 7 (7), 1902398 (2020).
- 6- I.M. Bjørge, M. Salmeron-Sanchez, C.R. Correia, J.F. Mano - Cell behavior within nanogrooved sandwich culture systems. *Small*, 16 (31), 2001975 (2020).
- 7- M.D. Neto, A. Stoppa, M.A. Neto, F.J. Oliveira, M.C. Gomes, A.R. Boccaccini, P.A. Levkin, M.B. Oliveira, J.F. Mano - Fabrication of quasi-2D shape-tailored microparticles using wettability contrast-based platforms. *Advanced Materials*, 33(14), 2007695 (2021).
- 8- M.M. Maciel, T.R. Correia, V.M. Gaspar, J.M.M. Rodrigues, I.S. Choi, J.F. Mano - Partial coated stem cells with bioinspired silica as new generation of cellular hybrid materials. *Advanced Functional Materials*, 31(29), 2009619 (2021).
- 9- M. Zargarzadeh, A.S. Silva, C. Nunes, M.A. Coimbra, C.A. Custódio, J.F. Mano - Self-glucose feeding hydrogels by enzyme empowered degradation for 3D cell culture. *Materials Horizons*, 9(2), 694-707 (2022).
- 10- R.C. Gonçalves, S. Vilabril, C.M.S.S. Neves, M.G. Freire, J.A.P. Coutinho, M.B. Oliveira, J.F. Mano - All-aqueous freeform fabrication of perfusable self-standing soft compartments. *Advanced Materials*, 34(31), 2200352 (2022).