Curriculum Vitae - Professor Manuel Salmeron-Sanchez

Prof Manuel Salmeron-Sanchez is a world leader in biomedical materials for in vitro modelling, regenerative medicine and cancer (>190 papers, h-index 56). He leads a multidisciplinary group with 12 PhD students and 8 postdocs. Manuel was based in Valencia (Spain) until 2013 where he pioneered novel materials that triggered protein organisation (Science Advances 2016). He was awarded an ERC Consolidator Grant in 2012 to investigate materials that promote growth factor binding and their use in regenerative medicine. He moved to Glasgow in 2013 where he has assembled a multidisciplinary team that have generated internationally leading outcomes and radical new concepts: the use of viscosity to control cell behaviour (PNAS 2018); living biomaterials (bacteriabased materials) for stem cell engineering (Advanced Materials 2018); the low dose use of BMP-2 for bone regeneration (Advanced Science 2019), the relationship between cell mechanics and metabolism in cancer (Nature Metabolism 2020) and new materials that capture latent proteins (Advanced Materials 2024). Manuel develops basic concepts that are pushed all the way to translation. He received two ERC-PoC awards used to further develop material-based bone regeneration technologies that are now being used, funded by the Sir Bobby Charlton Foundation, to help landmine survivors. Manuel holds an ERC Advanced Grant (2022) to develop the next generation of viscoelastic materials for regenerative medicine. Manuel has filed 3 patents (1 granted) and leads a novel clinical trial using materials for bone regeneration to be delivered in 2025. In 2018, in collaboration with vets from the small animal hospital at the University of Glasgow, he developed the technology that saved from amputation the leg of Eva –a Munsterlander run over by a car who developed an infected bone critical size defect (see <u>https://goo.gl/1Z3r8t</u>). Manuel is also a keen science communicator who participates in public engagement events (e.g. Science in the Café in Singapore, Spain and UK) and has recently led a team of 20 PhD students and early career researchers with an exhibit at the Science Summer Exhibition of the Royal Society (material matters – biomaterials for bone repair). Manuel has had his research broadcasted in national and international papers, TV (UK BBC, BBC World, Channel 4 and internationally) and Radio.

Education

November 2002	PhD, Materials Science (Biomaterials), Technological University of Valencia, Spain.
September 1997	MEng, Engineering, Technological University of Valencia, Spain (six year training)

Present Appointment

Chair of Biomedical Engineering / Head of School		+44 141 330 5228
School of Engineering, University of Glasgow		Manuel.Salmeron-Sanchez@glasgow.ac.uk
Glasgow, G12 8LT, United Kingdom		short url: <u>https://goo.gl/ZPHY4E</u>
ICREA Research Professor Institute for Bioengineering of Catalonia Barcelona, 08028, Spain	 .	msalmeron@ibecbarcelona.eu Short url: <u>https://rb.gy/5ssvdt</u>

Employment History

Since 08/22 2020 2014 – 2022	Head of James Watt School of Engineering, University of Glasgow, UK Visiting Professor, Institute of Advanced Materials, Kyushu University, Fukuoka, Japan Head of Division of Biomedical Engineering, School of Engineering, University of Glasgow, UK
Since 03/13	Chair of Biomedical Engineering, School of Engineering, University of Glasgow, United Kingdom.
2011-12	Head of Materials and Nanotechnology, Abengoa Research, Seville, Spain
2010-13	Full Professor (Catedratico de Universidad, national habilitation awarded in 2009), Centre for Biomaterials and Tissue Engineering, Technical University of Valencia, Spain.

2010 Visiting Professor, Petit Institute for Bioengineering and Bioscience, Georgia Institute of Technology, Atlanta, Georgia, USA. Associate Professor (Titular de Universidad), Centre for Biomaterials and Tissue Engineering, 2008-09 Technical University of Valencia, Spain. Visiting fellow, Department of Macromolecular structural chemistry, KU Leuven, Belgium. 2006 2005-07 Assistant Professor, Technical University of Valencia, Spain. 2004 Post-doctoral Fellow, Department of Macromolecular Structural Chemistry, KU Leuven, Belgium. 2003 Post-doctoral Fellow, Institute for Macromolecular Chemistry, Prague, Czech Republic. 1997-02 Fellow "Formacion del Personal Investigador", Department of Thermodynamics, Technical University of Valencia, Spain.

Honors and Awards Indicators

- 2019 Elected Fellow of the Royal Society of Edinburgh (Scottish National Academy of Sciences and arts), UK
- 2018 Award received from the Times Higher Education: Innovative project of the year (runner-up), UK
- 2018 Award received from the Guardian: Research with Impact (runner-up), UK
- 2012 Award received from Spanish National Network on Biomaterials, Bioengineering and Nanomedicine (CIBER-BBN). Young Investigator Award, Spain
- 2009 Award received from Universitat Politecnica de Valencia (Teaching excellence award), Spain
- 2003 Award received from Universitat Politecnica de Valencia (Best PhD Thesis in 2002), Spain
- 2003 Postdoctoral Fellowship, Institute for Macromolecular Chemistry, Prague, Czech Republic.
- 1997-02 PhD Scholarship (FPU), Department of Thermodynamics, Technical University of Valencia, Spain.

Institutional responsibilities

Since 2022 – Head of James Watt School of Engineering, University of Glasgow

Since 2019 – Member of the selection committee of new Fellows of the Royal Society of Edinburgh, UK Since 2018 – Co-founder & co-Director, Centre for the Cellular Microenvironment, University of Glasgow Since 2017 – Member of the School Executive Group, School of Engineering, University of Glasgow, UK 2014 – 2022 – Head of Division of Biomedical Engineering, School of Engineering, University of Glasgow, UK Since 2015 – Honorary degree committee, University of Glasgow, UK 2008 – 2013 – Director of Research, Department of Physics, Universitad Politecnica Valencia, Spain

Major collaborations (with research joint projects/papers, student/postdoc mobility)

- Andres Garcia, bone regeneration, Georgia Tech, US
- Masaru Tanaka, Kyushu University, Japan
- Pere Roca-Cusachs, mechanotransduction, IBEC, Spain
- Thomas Barker, extracellular matrix, Univesity of Virginia, US
- Matt Dalby, stem cell engineering, University of Glasgow, UK
- Laura Machesky, cancer biology, Beatson Institute, Glasgow, UK
- João Mano, natural materials, University of Aveiro, PT
- Molly Stevens, 3D bioprinting, Imperial College London, UK

Selected publications as senior author

1. Dhawan, U., Williams, J. A., Windmill, J. F.C., Childs, P., Gonzalez-Garcia, C., Dalby, M. J. and <u>Salmeron-Sanchez</u>, <u>M.</u> (2024) Engineered surfaces that promote capture of latent proteins to facilitate integrin-mediated mechanical activation of growth factors. **Advanced Materials** 36(23):e2310789.

2. Donnelly H, Ross E, Xiao Y, Hermantara R, Taqi AF, Doherty-Boyd WS, Cassels J, Tsimbouri PM, Dunn KM, Hay J, Cheng A, Meek RMD, Jain N, West C, Wheadon H, Michie AM, Peault B, West AG, Salmeron-Sanchez M, Dalby MJ. (2024). Bioengineered niches that recreate physiological extracellular matrix organisation to support long-term haematopoietic stem cells, **Nature Communications** 10;15(1):5791.

3. Dobre, O., Oliva, M.A.G., Ciccone, G., Trujillo, S., Rodrigo-Navarro, A., Venters, D.C., Llopis-Hernandez, V., Vassalli, M., Gonzalez-Garcia, G., Dalby, M.J. and <u>Salmeron-Sanchez, M.</u> (2021) A Hydrogel Platform that Incorporates Laminin Isoforms for efficient Presentation of Growth Factors – Neural Growth and Osteogenesis. **Advanced Functional Materials**, 31(12), 210225.

4. Trujillo, S., Gonzalez-Garcia, C., Rico, P., Reid, A., Windmill, J., Dalby, M.J., and <u>Salmeron-Sanchez, M.</u> (2020) Engineered 3D hydrogels with full-length fibronectin that sequester and present growth factors. **Biomaterials**, 252, 110104.

5. Mpoyi, E.N, Cantini, M., Sin, Y., Fleming, L., Zhou, D., Costell, M., Lue, Y., Kadler, K., García, A.J., Van Agtmael, T., <u>Salmeron-Sanchez, M. (</u>2020) Material-driven fibronectin assembly rescues matrix defects due to mutations in collagen IV in fibroblasts. **Biomaterials** 252, 12090.

6. Hay, J., Rodrigo-Navarro, A., Petaroudi, M., Bryskin, A. V., Garcia, A.J., Barker, T.H., Dalby, M.J. and <u>Salmeron-Sanchez, M.</u> (2018) Bacteria-based materials for stem cell engineering. **Advanced Materials**, 30(43), e1804310.

7. Cheng, Z.E.; Alba-Perez, A., Gonzalez-Garcia, C., Donnelly, H., Llopis-Hernandez, V., Jayawarna, V., Childs, P., Shields, D.W., Ruiz-Cantu, L., Reid, A., Windmill, J., Addison, E., Corr, S., Marshall, W., Dalby, M.J., and <u>Salmeron-Sanchez, M.</u> (2018) Nanoscale coatings for ultra-low dose BMP-2-driven regeneration of critical-sized bone defects. **Advanced Science**, 6(2), 1800361.

8. Bennett, M., Cantini, M., Reboud, J., Cooper, J.M., Roca-Cusachs, P. and <u>Salmeron-Sanchez</u>, <u>M. (</u>2018) Molecular clutch drives cell response to surface viscosity. **Proceedings of the National Academy of Sciences of the United States of America**, 115(6), 1192-1197.

9. Rico, P., Mnatsakanyan, H., Dalby, M.J. and <u>Salmeron-Sanchez, M.</u> (2016) Material-driven fibronectin assembly promotes maintenance of mesenchymal stem cell phenotypes. **Advanced Functional Materials**, 26(36), 6563-6573.

10. Llopis-Hernandez, V., Cantini, M., González-García, C., Cheng, Z., Yang, J., Tsimbouri, P., García, A.J., Dalby, M.J. and <u>Salmeron-Sanchez, M.</u> (2016) Material-driven fibronectin assembly for high-efficiency presentation of growth factors. **Science Advances**, 2(8), e1600188. <u>IF 14.1</u>

11. Mpoyi, E. N., Cantini, M., Reynolds, P. M., Gadegaard, N., Dalby, M.J. and <u>Salmeron-Sanchez</u>, <u>M.</u> (2016) Protein adsorption as a key mediator in the nanotopographical control of cell behavior. **ACS Nano**, 10(7), 6638-6647.

Selected review papers as senior author

1. Rodrigo-Navarro. A., Sankaran, S., Dalby, M.J., del Campo, A. and <u>Salmeron-Sanchez, M</u>. Engineered living materials – Using microbes to program new functionalities in biomaterials. Nature Reviews Materials (2021), *accepted* • 2. Dalby, M.J., García, A.J. and <u>Salmeron-Sanchez, M</u>. (2018) Receptor control in mesenchymal stem cell engineering. Nature Reviews Materials, 3, 17091. [IF 66.3] • 3. Barcelona Estaje, E., Dalby, M. J., Cantini, M. and <u>Salmeron-Sanchez, M</u>. (2021) You talking to me? Cadherin and integrin crosstalk in biomaterials design. Advanced Healthcare Materials, 10(6), 2002048 [IF 9.9]• 4. Sarrigiannidis, S. O., Rey, J. M., Dobre, O., Gonzalez Garcia, C., Dalby, M. J. and <u>Salmeron-Sanchez, M</u>. (2021) A tough act to follow: collagen hydrogel modifications to improve mechanical and growth factor loading capabilities. Materials Today Bio, 10, 100098 [IF 7.3]• 5. Cantini, M., Donnelly, H., Dalby, M. J. and <u>Salmeron-Sanchez, M</u>. (2020) The plot thickens: the emerging role of matrix viscosity in cell mechanotransduction. Advanced Healthcare Materials, 9(8), 1901259 [IF 9.9]• 6. Llopis-

Hernández, V., Cantini, M., González-García, C. and <u>Salmeron-Sanchez, M.</u> (2015) Material-based strategies to engineer fibronectin matrices for regenerative medicine. **International Materials Reviews** 60(5), 245-264 [IF 14.4].

Book chapters

6. Anderson, H., Llopis-Hernandez, V., Sweeten, P., Donnelly, H., Gurden, R., Orapiriyakul, W., **Salmeron-Sanchez**, **M.**, Dalby, M.J. and Tsimbouri, M.P. (2017) Nanoscale surface cues and cell behaviour. In: Hashmi, S. (ed.) *Reference Module in Materials Science and Materials Engineering*. Elsevier. ISBN 9780128035818 (doi:10.1016/B978-0-12-803581-8.10226-7)

5. Coelho, N.M., Llopis-Hernandez, V., **Salmeron-Sanchez, M.** and Altankov, G. (2016) Dynamic reorganization and enzymatic remodeling of type IV collagen at cell-biomaterial interface. In: Christov, C. Z. (ed.) *Insights into Enzyme Mechanisms and Functions from Experimental and Computational Methods*. Series: Advances in protein chemistry and structural biology (105). Elsevier, pp. 81-104. ISBN 9780128048252 (doi:10.1016/bs.apcsb.2016.06.001)

4. Rico Tortosa, P., Cantini, M., Altankov, G. and **Salmeron-Sanchez, M.** (2014) Matrix protein interactions with synthetic surfaces. In: Pradas, M.M. and Vicent, M.A. (eds.) *Polymers in Regenerative Medicine: Biomedical Applications from Nano- to Macro-Structures*.Springer, pp. 91-146. ISBN 9780470596388 (doi:10.1002/9781118356692.ch3)

3. Cantini, M., Gonzalez-Garcia, C., Llopis-Hernández, V. and **Salmeron-Sanchez, M.** (2012) Material-driven fibronectin fibrillogenesis. In: Horbett, T., Brash, B. and Norde, N. (eds.) *Proteins at Interfaces III State of the Art 2012.* Series: ACS symposium series (1120). American Chemical Society: Washington DC, VA, USA, pp. 471-496. (doi:10.1021/bk-2012-1120.ch022)

2. Cantini, M., Rico, P. and **Salmeron-Sanchez, M.** (2012) Fibronectin fibrillogenesis at the cell-material interface. In: Mano, J.F. (ed.) *Biomimetic Approaches for Biomaterials Development*. Wiley: Weinham, Germany. ISBN 9783527329168 (doi:10.1002/9783527652273.ch8)

1. Salmeron-Sanchez, M. and Altankov, G. (2010) Cell-protein-material interaction in tissue engineering. In: Eberli, D. (ed.) *Tissue Engineering*. InTech: Vienna, Austria.

Patents

1. Materials and methods for Tissue Regeneration (WO 2016189094 A1). University of Glasgow, 2015. The patent has granted in Europe and the US.

2. Method of stimulating chondrogenesis using mechanical stimulation. University of Glasgow (filed 2020).

3. Novel Bioinks for 3D printing. Filed in the UK in September 2021

Research grants

Principal Investigator

22. Mechanobiology-based Medicine. EPSRC Transformative Health Technology HT2050. 2024 – 29. (£4,5 M)

21. Engineered Viscoelasticity for regenerative microenvironments. ERC AdG. 2023 – 28. (2,5 M€)

20. Mechanical passport of mesenchymal stem cells. *The Leverhulme Trust. 2020* – 23. (£180k)

19. A modular strategy for the repair of critical sized bone fractures – HEALIKICK. EU Horizon 2020. 2021 – 26 (5,5 M€)

18. Knowledge Transfer Partnership grant with Cell Guidance Systems (Cambridge). Funded by Innovate U. 2019 – 2021 (£140 k)

17. Development of Novel Bio-inks for 3D printed bone grafts. Medical Research Scotland. 2018 – 21. (£115k)

16. Synergistic growth factor microenvironments for veterinary bone regeneration - HEALIGRAFT. *European Research Council – ERC PoC. 2018 – 20.* (£150k)

15. Working together - combined technologies for robust engineering of bone grafts with controlled geometry. *The Sir Bobby Charlton Foundation.* 2017 - 21. (£2,8M)

14. Engineering growth factor microenvironments - a new therapeutic paradigm for regenerative medicine. *EPSRC Programme Grant. 2016* – 21. (£4,5M)

13. Bioengineering microenvironments for pancreatic cancer cell invasion. Cancer Research UK. 2015 – 19. (£118k)

12. Living interfaces based on non-pathogenic bacteria to control stem cell differentiation. *The Leverhulme Trust.* 2015 – 18. (£180k)

11. Translational synergistic growth factor microenvironments - SPRAYNERGY. *European Research Council – ERC PoC* 2016-17. (£150k)

10. Synergistic microenvironments for non-union bone defects. Medical Research Council. 2014-17. (£1.1M)

9. Material-driven fibronectin fibrillogenesis to engineer synergistic growth factor microenvironments. *European Research Council – ERC Consolidator Grant* 2013 -18. (1.5 M€)

8. PROTDEL: Microfluidics-Generated Hydrogel Particles for Protein Delivery. EU-FP7. 2013 – 15. (£220k)

- 7. Nanostructured gel for degenerative skeletal disorders. FP7 EURONANOMED. 2012-14. (£90k)
- **6.** Bio-inspired gel for cartilage and bone regeneration. *FP7 EULANEST program*. 2010-11. (£100k)
- 5. Functional living bio-interfaces. Spanish government High Risk High Value Program. 2010–11. (£100k)
- 4. Matrix protein dynamics at the cell-material interface. Spanish Ministry of Science. 2009-12. (£200k)
- 3. Efficient technologies for health TECNOCAI. Spanish government. 2010–11. (£300k)
- 2. Surface engineering for regenerative medicine. Spanish Ministry of Science. 2006-9. (£150k)
- 1. New tools to characterize cell/material interactions. Universitat Politècnica de València. 2012-14. (£50k)

Co-Investigator

5. Nanovibrational control of chondrogenic differentiation. EPSRC responsive mode (£890 k, PI Prof Matt Dalby)

4. Engineering the bone marrow niche to control stem cell regulation, metastatic evolution and cancer dormancy. *EPSRC Programme Grant* (£6.1 M, PI Prof Matt Dalby).

3. Materials exploitation of the biointerface to control MSC quality and niche phenotype. *BBSRC. 2017* – 20. (£570k, PI Prof Matt Dalby)

2. Rapid Bone Graft Synthesis Through Dual Piezoelectric/Nanomechaniocal Stimulation. *BBSRC. 2017* – 20. (£272k, PI Prof Matt Dalby)

1. Network for development of soft nanofibrous construct for cellular therapy of degenerative skeletal disorders. *FP7 – Industry-Academia Partnerships and Pathways*. 2012 -14. (£1.2M, PI Prof George Altankov)

Contributions to Conferences and Workshops

Manuel has been member of scientific committees, organizing committees, reviewer and chairman in international meetings. Over the last 10 years, he has been given > 35 invited presentations in international conferences and > 30 invited seminars in world leading Universities (e.g. Imperial College London, University of Cambridge, King's College London, ETH Zurich, Mechanobiology Institute Singapore) over the last 5 years, e.g.: 1. Biointerfaces International, Zurich, August 2018. 2. World Biomechanics Conference, Dublin, Ireland, July 2018. 3. TERMIS EU 2016, Uppsala, Sweden, July 2016. 4. 30th International Symposium for Polymer Analysis and Characterisation, Singapore, June 2016. 5. TERMIS World Conference, Boston, September 2015. 6. Biological Surfaces and Interfaces, FEBS/EMBO Symposium, Sant Feliu de Guixols, Spain, 2013.

Manuel has been involved in the **organisation of several scientific international conferences and symposia**: (i) Workshop Chair within TERMIS-EU (2021, Maastricht, NL & 2002, Krakow, Poland). (ii) Workshop chair within the World Biomaterials Conference (2020), Glasgow, UK. (iii) Chair of the FEBS Conference on Biological Surfaces and Interfaces (2017), 140 participants, Sant Feliu de Guixols, ES. (iv) Workshop Chair within the World Biomaterials Conference (2016), 2500 participants, Montreal, Canada. (v) Workshop Chair within the TERMIS EU (2015), 1200 participants, Uppsala, Sweden. (vi) Workshop Chair within the TERMIS World (2015), 3200 participants, Boston, US.

Outreach and engagement activities

Manuel is a keen science communicator who participates in public engagement events. His research has been broadcasted in national and international papers, TV (UK BBC, BBC World, Channel 4 and internationally) and Radio.

- Exhibit during the ARCADIA festival, bringing science to the public, Glasgow, September 2022.
- School visit day and talk to promote biomedical engineering in High School students, Glasgow Academy, March 2019.
- Engagement talk in a Shotts High Security Prison, bringing science to prisons. Shotts, Scotland, November 2019.
- Exhibit at IKEA science festival featuring our research on stem cells and cell therapies. Glasgow, October 2019.
- Exhibit at the Science Summer Exhibition of the Royal Society. material matters biomaterials for bone repair, July 2018. <u>https://goo.gl/uG2mCg.</u> This is a major public engagement event. I coordinated a team of 20 students/postdocs and spent one week in London with thousands of visitors.
- Exhibit at Glasgow Science Festival, June 2018, featuring our research on biomaterials, stem cells and cancer.
- Public engagement talk for Night of Science, Glasgow, February 2017
- Public engagement talk, Science in the Café, Singapore, June 2016.

Supervision of graduate students and postdoctoral fellows

Over the past 10 years Manuel has supervised > 25 PhD students (all completed on time), 15 post-doctoral researchers and has contributed to the mentoring of 10 early career researchers during transition to independence as principal investigators in academia and industry. Manuel has worked with students to define their career after the PhD by providing them with tools that help develop their potential and interests (e.g. placements with international groups, presentations in international conferences, enabling contacts with industry, supporting additional skills such as business development and entrepreneurship). People from his team are distributed in a variety of sectors, for example 3 are now PIs in academia (University of Glasgow, Universitat

Politecnica Valencia), 4 have been awarded fellowships to progress towards independence, 5 are postdocs (Glasgow, Cambridge, Ottawa), 5 are in industry – including senior scientists in Pfizer (California) and Mogrify (Cambridge) – and 2 are in scientific/medical writing. In his role as Head of Biomedical Engineering in Glasgow, he has worked with at least 10 early career researchers to guide them through the hurdles of the first academic position and have mentored them to secure permanent (tenured/open-ended) positions in transition from personal fellowships.

Reviewing and editorial activities

Manuel is a regular reviewer for a large number of journals, including ACS Nano, Advanced Materials, Biomaterials, Nature Communications, Nature Materials, Science and Science Advances. He also serves as a reviewer for research agencies in Spain, France, Argentina, Chile, Romania, Czech Republic, India, UK (EPSRC, BBSRC, MRC, Wolfson Foundation, The Welcome Trust), the EU (ERC, FET-OPEN), and USA. Manuel has served in several international grant panels:

- 2023 Panel member, EPSRC Engineering panel, UK
- 2023 Atraction of talen programme, Spain
- 2021 Panel member, BBSRC Engineering Biology, UK
- 2021 Panel member, Strategic projects, Spain
- 2020 Panel member, Ramon y Cajal Fellowships, Spain
- Since 2020 Chair, Early Career Fellowships, Welcome Trust/Department of Biotechnology (India Alliance)
- Since 2017 Panel Member, Early Career Fellowships, Welcome Trust/Department of Biotechnology (India Alliance).
- Since 2016 Member of the UK Engineering and Physical Sciences Research Council Peer Review College

Editorial Board

Since 2019, Manuel is editor in chief of *Biomaterials Advances* (Elsevier, Q1 journal in Biomaterials) and <u>sits on the</u> <u>Editorial board for</u>:

- Since 2018 Materials Today Bio, Elsevier
- Since 2019 Biomedical Engineering Advances, Elsevier
- Since 2020 Advanced Healthcare Materials, Wiley

Since 2020 – Advanced NanoBio Med, Wiley

Memberships of scientific societies

- Since 2014 Member, Tissue Engineering and Regenerative Medicine International Society
- Since 2011 Member, European Society for Biomaterials
- Since 2015 Co-Director, Glasgow Orthopaedic Research Initiative (GLORI), UK

Since 2019 – Elected Fellow of the Royal Society of Edinburgh, UK

Organisation of scientific meetings

Manuel has been involved in the **organisation of several scientific international conferences and symposia**: (i) Workshop Chair within TERMIS-EU (2021, Maastricht, NL & 2002, Krakow, Poland). (ii) Workshop chair within the World Biomaterials Conference (2020), Glasgow, UK. (iii) Chair of the FEBS Conference on Biological Surfaces and Interfaces (2017), 140 participants, Sant Feliu de Guixols, ES. (iv) Workshop Chair within the World Biomaterials Conference (2016), 2500 participants, Montreal, Canada. (v) Workshop Chair within the TERMIS EU (2015), 1200 participants, Uppsala, Sweden. (vi) Workshop Chair within the TERMIS World (2015), 3200 participants, Boston, US.

Professional Activities beyond the University

Since 2022 – Steering Board Royce Institute (Biomedical Materials), UK

Since 10/2020 – Scientific Advisory Board, BiogelX, Glasgow, UK. Since 11/2019 – Editor in Chief, Biomaterials Advances (Elsevier). 2011/12 – Director of Division, Materials and Nanotechnology. Abengoa Research, Abengoa, Seville.