

Professor Paula M Mendes MSc, PhD, CSci MChemE, MRSC

Professor of Advanced Materials and Nanotechnology
EPSRC Leadership Fellow

[School of Chemical Engineering \(/schools/chemical-engineering/index.aspx\)](/schools/chemical-engineering/index.aspx)

Contact details

Telephone **+44 (0) 121 414 5343 (tel:+44 121 414 5343)**

Fax +(44) (0)121 414 5324

Email **p.m.mendes@bham.ac.uk (mailto:p.m.mendes@bham.ac.uk)**

School of Chemical Engineering
University of Birmingham
Edgbaston
Birmingham
B15 2TT
UK



About

Paula M Mendes is a Professor of Advanced Materials and Nanotechnology and EPSRC Leadership Fellow in the School of Chemical Engineering.

Her research interests lie in the interdisciplinary area of nanoscience and nanotechnology, and in particular on the development of novel methods for controlling the structure and functionality of materials at the molecular and nanometer scale.

Her research is driven by both fundamental scientific questions and potential applications in the energy, and in particular, biomedical field.

The impact of her research is in two main areas:

- development of surface materials with stimuli-responsive and novel biofunctional properties
- synthesis and Characterisation of Functional Inorganic Nanoparticles

She has published more than 70 papers, reviews and book chapters, with several invited lectures and keynote presentations at leading academic institutions, conferences and companies across UK and internationally. She is an editor of Journal of Experimental Nanoscience, as well as editor of a book on Nanotechnology.

Honors and Awards

- European Research Council (ERC) Consolidator Grant, 2014
- EPSRC Leadership Fellowship, 2013
- University of Birmingham Research Impact Award, 2013
- UK-US Collaboration Development Award, 2012
- The Institute of Materials, Minerals and Mining (IOM3) SMART.idea Award, 2007
- MRC/EPSC Institutional Discipline Bridging Award, 2007
- Wellcome Trust Value in People Award, 2006

Qualifications

- Higher Education Academy (HEA) Associate Fellow, 2009
- Chartered Scientist and Corporate Member of the Institution of Chemical Engineers (CSci MChemE), 2007
- PhD in Chemical Engineering, University of Porto, Portugal, 2002
- MSc in Chemical Engineering, University of Porto, Portugal, 1997

Biography

Paula M Mendes received her MSc (1997) and PhD (2002) degrees in Chemical Engineering from the Faculty of Engineering, University of Porto, Portugal. In 1997, she was awarded a competitive University Fellowship to carry out research in computational chemical engineering at the National Polytechnic Institute of Lorraine (INPL), Nancy, France.

After working for a year in the Lameirinho Textile Industry, Guimarães, Portugal as an Engineer-Assistant, she joined the Laboratory of Process, Environment and Energy Engineering at University of Porto to pursue a doctorate under the supervision of Professor Carlos Costa and Professor Naceur Belgacem.

While a postgraduate student, she received a competitive University Research Fellowship to perform part of her PhD studies in the University of Manchester Institute of Science and Technology (UMIST), UK. She undertook post-doctoral research firstly (2002-04) in the Research group of Professor Jon Preece, School of Chemistry, University of Birmingham, UK, and subsequently (2004-06) at the Department of Chemistry and Biochemistry, University of California, Los Angeles (UCLA), USA in the research group of Professor Sir Fraser Stoddart.

In October 2006, she became a University Academic Fellow in the School of Chemical Engineering, University of Birmingham, UK. She was promoted to Senior Lecturer in 2011 and Professor in 2013. She is a Chartered Scientist, Corporate Member of the Institution of Chemical Engineers and editor of Journal of Experimental Nanoscience. She acts as a referee for the European Research Council Executive Agency (ERCEA), EPSRC, Leverhulme Trust, Wellcome Trust and Royal Society.

Teaching

- BEng Chemical Engineering
- MEng Chemical Engineering

Postgraduate supervision

Paula M Mendes is interested in supervising doctoral research students in the following areas:

- Design and Fabrication of Micro- or Nanostructured Biological Surfaces
- Design and Fabrication of Switchable Biological Surfaces
- Synthesis and Characterisation of Functional Nanoparticles

If you are interesting in studying any of these subject areas please contact Paula Mendes on the contact details above, or for any general doctoral research enquiries, please email: dr@contacts.bham.ac.uk (<mailto:dr@contacts.bham.ac.uk>) or call +44 (0)121 414 5005.

For a full list of available Doctoral Research opportunities, please visit our Doctoral Research programme listings.

Research

The research in the **Mendes group** (</research/activity/chemical-engineering/energy-chemical/nanoengineering-surface-chemistry/index.aspx>) lies in the interdisciplinary area of nanoscience and nanotechnology, and currently focuses on the development of biomimetic materials for studies of cell behaviour, and bio- and nanomaterials with applications in medical imaging and catalysis.

Publications

A **[list of Paula's publications](/research/activity/chemical-engineering/energy-chemical/nanoengineering-surface-chemistry/publications.aspx)** (</research/activity/chemical-engineering/energy-chemical/nanoengineering-surface-chemistry/publications.aspx>) can be found on the Nanoengineering and Surface Chemistry research website.

