

Curriculum Vitae

Name: Miguel Ângelo Parente Ribeiro Cerqueira

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Education and training:

December 2010 – PhD in Chemical and Biological Engineering, Department of Biological Engineering of the University of Minho, from November 2006 to October 2010, supported by Fundação para a Ciência e a Tecnologia with a scholarship. Approved by unanimity on 21 December 2010 during public defence.

October 2005 - (5 years): Graduation in Biological Engineering - Chemistry and Food Technology. Department of Biological Engineering of University of Minho, from September 2000 to October 2005. Final classification of 16 values (0-20).

Others:

- From the Lab to the Market – the next step for INL's Researchers. Porto Business School. Braga, Portugal, from 13 to 18 June 2016;
- Training School of the COST scientific programme on Electrospinning of Polymer Nanofibers - COST Action MP1206. Barcelona, from 3 to 7 November 2013;
- São Paulo School of Advanced Science: Advances in Molecular Structuring of Food Materials. Faculdade de Zootecnia e Engenharia de Alimentos da Universidade de São Paulo. Pirassununga (SP), Brazil, from 1 to 5 April 2013;
- Participation in the course Startup Laboratory “III Laboratório de Empresas”, promoted by TecMinho, Guimarães, Portugal, from 1 October until 31 March 2013;
- Participation in the course Business Ideas Laboratory “VII Laboratório de Ideias de Negócio – IdeaLab”, promoted by TecMinho, Guimarães, Portugal, from 1 March until 31 July 2012;
- English Course Council Of Europe Level B1+, promoted by the British Institute of Braga, from 1 October 2011 to 19 June 2012;
- Training course Approach to Quality Management System promoted by XZ – Consultores (14 h) from 28 to 29 July 2011. Final classification of 16 values (0-20);
- Participation in the course Specialization in Technological Entrepreneurship “Curso de Especialização em Empreendedorismo Tecnológico”, promoted by TecMinho, Guimarães, Portugal, from 1 October 2010 until 31 March 2011;
- Training School of the COST scientific programme on Eco-sustainable food packaging based on polymer nanomaterials - COST Action FA0904. University of St Cyril and Methodius at Skopje, Makedonia, from 3 to 5 November 2011;

- Free Course of Galician A2, Institute of Arts and Humanities of the University of Minho in the academic year 2009/2010;
- International Food Nanoscience Conference (IFT course). Anaheim, EUA, 6 July 2009.
- Training course "Formação Pedagógica Inicial de Formadores", certificate nº EDF 512358/2009 DN with final rating: Very Good, promoted by PowerFORM - Vocational Training, Lda, from April 2 to May 8 2009;
- III Meetings Food Safety Technicians, University of Minho, Castro Pinto and Costa (16 h), from 11 to 12 May 2006.

Work experience:

Actual positions

- Research Fellow in the International Iberian Nanotechnology Laboratory, Braga, Portugal, from 1 March 2016 until the present;
- Co-founder of the company Improveat, Lda (Spin-off of the University of Minho), Braga, Portugal, from 1 August 2013 until the present.

Previous positions

- Postdoctoral Researcher in the Centre of Biological Engineering, University of Minho, with the project "Development and Characterization of Nano-structured Systems for Food Applications", Braga, Portugal. Fellowship supported by Fundação para a Ciência e a Tecnologia, from 1 April 2011 to 29 February 2016;
- Assistant Professor (20% contract) in the Department of Biological Engineering, University of Minho, Braga, Portugal, from 1 September 2015 to 29 February 2016;
- Assistant Director of Industry and Process Laboratory in the Department of Biological Engineering, University of Minho, Braga, Portugal, from September 2011 to March 2016;
- Assistant Professor (20% contract) in the Department of Biological Engineering, University of Minho, Braga, Portugal, from 15 September 2014 to 15 March 2015;
- Assistant Professor (20% contract) at the Department of Biological Engineering, University of Minho, Braga, Portugal, from 15 September 2013 to 15 March 2014;
- Assistant Professor (20% contract) at the Department of Biological Engineering, University of Minho, Braga, Portugal, from 1 October 2012 to 31 March 2013;
- Assistant Professor (40% contract) at the Department of Biological Engineering, University of Minho, Braga, Portugal, from 15 of September 2011 to 15 March 2012;
- PhD researcher at the Centre of Biological Engineering, University of Minho, from November 2006 to October 2010. Braga, Portugal. Supported by Fundação para a Ciência e a Tecnologia with a scholarship;
- Trainer at the organization ADLML - Associação de Desenvolvimento Local do Minho-Lima, Rua de Aveiro 198, Edifício Palácio, 2º andar - sala 211, 4900-495, Viana do Castelo, Portugal, from June to November 2010;
- Consultant in the Implementation of HACCP system at the Antiga Pastelaria e Padaria Souto, Sta Marta de Portuzelo, 4900 - Viana do Castelo, from 1 March 2007 to 1 December 2008;

- Consultant in the Implementation of the ISO 22000 at Secular Pão e Doce, Rua da Quintã – Real, 4700 - Braga, Portugal, from 1 November 2006 to 1 November 2007;
- Researcher at at Federal University of Ceará (Br) in the project “Research and characterization of new materials for the production of edible coatings”, Fortaleza, Brazil, from 1 November 2005 until 31 October 2006 (Alfa-Valnatura - EU programme of co-operation between higher education institutions of the EU and Latin America);
- Trainee at Castro, Pinto e Costa, Lda - Armazém E - Sector X (Norte), Zona Industrial da Maia I, 4475-249 Maia with the project “Methods of extraction, identification and quantification of functional compounds in bakery products”, Braga, Portugal, from 1 March 2005 until 31 August 2005.

Publications:

- 2 patents
- 1 book as editor
- 58 publications in Peer reviewed journals,
- 5 publications in Non-Peer reviewed journals,
- 13 published book chapters,
- 14 extended abstracts in international conferences,
- 64 abstracts in international conferences,
- 18 abstracts in national conferences.

Project participation:

- Desenvolvimento de nanopartículas biopoliméricas com função antimicrobiana (**member of the team**). Processo número: 2015/26359-0. Projeto de Pesquisa / Auxílio regular – FAPESP;
- Superabsorb - Development of a super absorbent biodegradable gel (**member of the team**). Funding body: Private Company (Pt);
- ENROBEE - Technology for the impermeabilization of food components aiming at their incorporation in hydrophilic food matrices (**member of the team**). Funding body: ANI – Agência Nacional de Inovação, S.A.; COMPETE 2020. Funding Program: COMPETE 2020;
- Functionalized nanostructured delivery systems for food applications: strategies to maximize bioactive compounds’ bioavailability and their safety evaluation (**member of the team**). Approved in the call FCT 2015 for SR&TD (PTDC/AGR-TEC/5215/2014). Team: Universidade do Minho (PT), Instituto de Biologia Experimental e Tecnológica (PT);
- “Desenvolvimento de filmes e revestimentos comestíveis utilizando subprodutos do pescado e avaliação de sua aplicação em produtos pesqueiros” (**member of the team**) Approved in the call MCTI/CNPQ/Universal 14/2014.
- “Obtenção, caracterização e aplicação de polissacarídeos para fins biotecnológicos: Caracterização química e avaliação do seu efeito em filés de pescado” (**member of the team**).
- “Biomateriais obtidos de resíduos da indústria pesqueira: Caracterização Química e Avaliação do seu efeito em filés de pescado” (**member of the team**).

- “Sistemas nanotecnológicos baseados em ingredientes biocompatíveis: caracterização, entrega controlada e digestão in vitro” (**member of the team**).
- “Caracterização de biomateriais obtidos de resíduos da indústria pesqueira e avaliação do seu efeito na qualidade do pescado produzido no nordeste brasileiro” (**member of the team**).
- NOVELTEC – “Desenvolvimento de Novas Tecnologias de Suporte à Criação de Produtos Inovadores” (**member of the team**). (PCT Agro-industrial, 13846; promotor líder: FRULACT - Indústria Agro-Alimentar, S.A.)
- “Revestimentos e Filmes Comestíveis: Avaliação do seu efeito na qualidade do pescado produzido no Nordeste brasileiro”. Approved in the call CNPq Universal 14/2011 (**member of the team**).

Honors and Awards:

- Inaugural Member of the International Academy of Food Science and Technology Early Career Scientist Section at the 18th IUFoST World Congress of Food Science and Technology, from 21-26 August 2016 (Ireland);
- Winner of Nutrition Awards in Research and Development, with the project Nutricap at 10th September 2015, Lisbon, Portugal;
- Medal of Honor in the day of “Dia do Município de Ponte da Barca”, at 24th October 2014, Ponte da Barca, Portugal;
- Young Scientist Award, 17th IUFoST World Congress of Food Science and Technology, from 17-21 August 2014 (Canada);
- 3rd Honorable mention of NutritionAwards in the Research and Development, with the project Bionutriccoat at 16 October 2013, Lisbon, Portugal.
- Finalist (as co-author) of the Graduate Student Research Paper Competition, IFT Annual Meeting and Food Expo, from 13 to 16 July 2013, Chicago, USA.
- 2nd Prize in the Business Contest Ideas – SpinUM (Concurso de Ideias de Negócio) promoted by TecMinho and SpinPark with the Business Idea: BioCheeseCoat, at 15 February 2013, Guimarães, Portugal.
- Award for the best PhD Thesis 2011 by the School of Engineering of the University of Minho;
- One of the 5 finalist for the 2009 George F. Stewart IFT International Research Paper Competition (selected within 600 abstracts), during the IFT Annual Meeting and Food Expo, Anaheim (Califórnia), EUA, from 6 to 9 de June;
- Scholarship merit award in 2005, promoted by University of Minho
- Scholar merit award in 2002 and 2003, promoted by University of Minho;

Students Supervision:

PhD students in progress:

- Maria José Costa - Development of active and smart bio-based structures at micro- and nanoscale and their use for encapsulation of bacteriophages and bioactive compounds. **supervisor** (co-supervisors: José Teixeira and Sanna Sillankorva). Doctoral thesis in Biological and Chemical Engineering. Expected conclusion in 2019;

- Artur Jorge Ferreira Martins – Novel organogel systems for enhanced food structure and functionality – a multiscale approach – **supervisor** (co-supervisors: António Augusto Vicente and Rosiane Lopes-da-Cunha). Doctoral thesis in Biological and Chemical Engineering. Expected conclusion in 2018;

PhD students concluded:

- Hélder Daniel da Silva – Development and characterization of bio-based nanosystems for the control release of functional compounds – co-supervisor (supervisor: Prof. Doutor António Augusto Vicente). Doctoral thesis in Biological and Chemical Engineering. Concluded on December 2015;

- Ana Isabel Bourbon – Application of nanostructures in food matrices as a delivery vehicle of bioactive compounds – co-supervisor (supervisor: Prof. Doutor António Augusto Vicente). Doctoral thesis in Biological and Chemical Engineering. Concluded on February 2016.

MSc students in progress:

- Arlete Maria Lima Marques – Antimicrobial assessment of phages encapsulated/entrapped in bio-based materials. **supervisor** – Improveat, Lda (supervisor UMinho: Sanna Maria Sillankorva). Integrated Master in Biological Engineering – University of Minho. Expected conclusion in October 2016;

- Magda Filipa Macedo Costa - Micro and nanoencapsulation of Salmonella phage phi68 for use in food packaging – **co-supervisor** (supervisor: Sanna Maria Sillankorva). Master thesis in Bioengineering - University of Minho. Expected conclusion in October 2016;

- Nuno Magalhães – Development of lipid-based micro- and nanostructures as carriers of functional compounds – **co-supervisor** (supervisor: António Augusto Vicente). Master thesis in Micro/Nano Technologies - University of Minho. Expected conclusion in November 2015.

MSc students concluded:

- Ana Catarina Matos Pereira – Development of new edible coatings for raspberries. – supervisor – Improveat, Lda (co-supervisor UMinho: Ana Pnheiro and supervisor at University of Porto: Luís Melo) Integrated Master in Chemical Engineering – University of Porto. Concluded on April 2016;

- André Manuel Ferreira Martins – Development of micro- and nanostructures for active and intelligent packaging. Master thesis in Micro/Nano Technologies – co-supervisor (supervisor: António Augusto Vicente). Master thesis in Micro/Nano Technologies - University of Minho. Concluded on March 2016;

- Cátia Filipa Afonso Alves - Suporte Laboratorial à Validação do Processo de Laminação e Estudo da Relação Permeabilidade a Oxigénio e Vapor de Água vs Materiais Barreira Produzidos na Vizelpas – **supervisor** (supervisor Vizelpas: Elvira O.M.A. Freitas; co-supervisor: António Augusto Vicente). Integrated Master in Biological Engineering – University of Minho. Concluded on December 2015;

- Teresa Matos. Novel antimicrobial food packaging systems using bacteriophages – **supervisor** – Improveat, Lda (supervisor UMinho: Sanna Maria Sillankorva). Integrated Master in Biological Engineering – University of Minho. Concluded on December 2015;

- Marta Fernanda de Sousa. Development of edible coatings to extend shelf-life of mushrooms – **supervisor** – Improveat, Lda (co-supervisor UMinho: António Augusto Vicente and supervisor at University of Porto: Luís Miguel

Soares Ribeiro Leite da Cunha). Master thesis in Consumer Sciences and Nutrition – University of Porto. Concluded on December 2015;

- Maria Alexandra Barroso Azevedo – Development of nanostructures for the encapsulation of vitamins – **co-supervisor** (supervisor: António Augusto Vicente). Master thesis in Bioengineering - University of Minho. Concluded on December 2013;

- Melissa Rivera Rodrigues – Evaluation of the behaviour of nanostructures in a Caco-2 cell model – **co-supervisor** (supervisor: António Augusto Vicente). Master thesis in Micro/Nano Technologies - University of Minho. Concluded on June 2013;

- Susana Fernandes dos Santos – Production of nanohydrogel from milk proteins – **co-supervisor** (supervisor: António Augusto Vicente). Master thesis in Micro/Nano Technologies in the University of Minho. Concluded on December 2012.

Peer Review work: Food and Bioprocess Technology: An International Journal; Journal of Agricultural and Food Chemistry; Food Hydrocolloids; Biomacromolecules; Journal of Dairy Science; Carbohydrate Polymers; Journal of Food Engineering; Industrial Crops and Products; Journal of Food Biochemistry; Journal of Development and Agricultural Economics; Postharvest Biology & Technology; Acta Biomaterialia; International Journal of Biological Macromolecules; African Journal of Microbiology Research; LWT-Food Science and Technology; Food Research International; Molecules; Materials Characterization.

Editorial work: Editor Board of Food Research International, Academic editor of the journal British Biotechnology Journal, SCIENCEDOMAIN International since December 2012.

Braga, October of 2016

Miguel Ângelo Parente Ribeiro Cerqueira