Paula Maria Lima e Castro

Current Post **Assistant Professor with Habilitation**
Prof. Auxiliar com Agregação
ESB, Universidade Católica Portuguesa

Higher Education

Habilitation (Agregação) in Biotechnology (2014)
PhD in Biochemical Engineering/Biotechnology
Department of Biochemical Engineering, University College London, U.K. (graduated 1994)
MSc in Food Science and Engineering (1st year)
Escola Superior de Biotecnologia, Universidade Católica Portuguesa (graduated 1990)
First degree in Food Engineering (1st Class Honours)
Escola Superior de Biotecnologia, Universidade Católica Portuguesa (graduated 1989)

Employment Profile

1998-present:	Escola Superior de Biotecnologia, Universidade Católica Portuguesa Assistant Professor
1995-1998:	Escola Superior de Biotecnologia, Universidade Católica Portuguesa Postdoctoral fellowship
1993-1995	Carbury Herne Ltd, Canterbury, Kent, UK Research Assistant
1987-1989	Escola Superior de Biotecnologia, Universidade Católica Portuguesa Demonstrator

Academic roles

1999 – 2002 – Coordinator of the Postgraduate couse on Environmental Management (three editions)
1999 – 2006 - Coordinator of the Environmental Engineering degree at Escola Superior de Biotecnologia, Universidade Católica Portuguesa.
2004- 2008 - Coordinator of the Master in Environmental Health
2008 - 2015 - Coordinator of the Master in Environmental Engineering
2006 – Present - Coordinator of the Bioengineering degree
2010 – present – Coordinator of the 1st Cycle at ESB-UCP
2013 – present – Member of Direction Board ESB-UCP

Research

Leader of the Group “Environmental Mitigation Tools and Strategies” of the Research Center CBQF – Center for Biotechnology and Fine Chemistry.

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Main areas of interest

i) Biodegradation and biocatalysis; ii) Biological systems for the treatment of wastewater and emissions and bioremediation; iii) Sustainable techniques for soil rehabilitation, agriculture practices and reforestation, including plant growth promoting bacteria and mycorrhiza. iv) Valorisation of waste materials

Post-graduate training

- 17 Phd Thesis concluded; 6 PhD programmes ongoing
- 8 on-going posdoc programmes
- More than 20 Master thesis concluded

Project Coordination and Team Member

TEAMING P2020 - Promoting Agri-food and Forestry Stakeholder Engagement for Knowledge Transfer and SMARTAgriFor partnerships. P2020, NORTE-01-0246-FEDER-000023. 2016 a 2017. Membro da equipa.

MultiBiorefinery: Estratégias multiuso para a valorização de uma gama alargada de subprodutos agroflorestais e das pescas: Um passo em frente na criação de uma biorrefinaria integrada.P2020, POCI-01-0145-FEDER-016403. 2016 a 2019. Membro da equipa

"Lab2Business - Transferência Tecnologia e Valorização Económica para o Sector Agroalimentar - NORTE-01-0246-FEDER-000011. 2016-2018.Norte-2020. Membro da equipa.

Ecotex - Desenvolvimento de soluções mais sustentáveis para coloração têxtil. Co-promoção, ANI - Agência Inovação. 2016 a 2019. Membro da equipa

Bio-n2-value: Biological tools for adding and defending value in key agro-food chains (NORTE-01-0145-FEDER000030) 2016 – 2019. Team member.

DISRUPT. Environmental Endocrine Disruptors: Current Situation in Macao, Neurobehavioral Effects and Bioremediation Strategies. Projecto 011/2014/A1. Fundo para o Desenvolvimento das Ciências e Tecnologia de Macau –FDCT. 2015-2017. Coordenador na ESB

SMARTAgriFor: Collaboration to develop a business plan for the Centre of Agriculture and Forestry (Grant Agreement 664599). 2015 - 31/05/2016. H2020.Team member.

URBANMYCOSERVE. Understanding and Managing Urban Ectomycorrhizal Fungi Communities to Increase the Health and Ecosystem Service Provisioning of Urban Trees. BiodivERsA3. 2017-2020. PI at ESB.

Degradação de fármacos recalcitrantes em águas residuais por processos biológicos e oxidação avançada. 2015-1016. Convénio entre Portugal (FCT) e Itália (CNR) - CNR-IRSA. Coordinator.

MICROSALT: Efficient rhizospheric microorganisms: ammelioration of saline stress in crops with economic significance. 2014-2015. Project coordinated by a posdoc in the group. Team member

Microbial and ecotoxicological characterization of soils and tailings from mining sites in South Morocco: phytoremediation assisted by microorganisms. Projectos de cooperação bilateral entre Portugal e Marrocos, Acordo de cooperação bilateral FCT-CNRST. Ref FCT/5909/24/52013/S. Coordinator.

HbioS – Biotecnhological innovations for removing sulphur compounds from WWTP emissions. Projecto nº 21592. QREN/POFC/SII&DT. 2013-2015. Coordinator at ESB.

FLUOROPHARMA - Biodegradation and removal of (chiral) fluorinated pharmaceuticals from wastewaters. PTDC/EBB-EBI/111699/2009. 2011-2014. Coordinator.

LeadingForest - Ectomycorrhizal fungi as leading players of reforestation processes. PTDC/AGR-CFL/111583/2009. 2011-2014. Coordinator.

ValorPeixe - Valorização de Subprodutos e Águas Residuais da Indústria de Conservas de Peixe. QREN/POFC/SII&DT. 2011-2013. Agência de Inovação. Team member.

iCOD - Innovative Technologies for Upgrading Codfish Processing By-products. QREN/POFC/SII&DT. 2009-2011. Co-coordination at ESB.

FLORESTA.NET – Network of reforestation demostration practices.Programa de Desenvolvimento Rural do Continente (PRODER) - Subprograma n.° 4 «Promoção do Conhecimento e Desenvolvimento de Competências» 2011-2013. Coordinator at ESB.

OBIT. Odour Biological Treatment. QREN/POFC/SII&DT. 2010-2012. Coordinator at ESB.

BIOCAT - Biocatalytic processes for the “green” production of value-added fluoroaromatic compounds. POCI 2010. 2007-2008. Coordenador.

BIOFLUOR. Biological production of commercially relevant fluorinated organic compounds. 2007-2010. PTDC/BIO/67306/2006. Coordenador.

PLANTICURT - Application of Artificial Wetlands in the fine-tuning of leather effluents. Programa IDEIA – Apoio à Investigação e Desenvolvimento Empresarial Aplicado. Agência de Inovação. Coordenador ESB. 2007-2008. Coordinator.

INSOLEX - 2006 – 2010. Innovative Solutions for Extracting High Value Natural Compounds. RTN Project - European Commission. Coordinator at ESB.

PLANTARI - Constructed wetlands for industrial wastewater treatment. FCT. Projecto POCI/AMB/60126/2004. 2005-2008. Coordinator.

MICOMETA - The role of Arbuscular Mycorrhizal Fungi in Phytoremediation of Heavy Metal contaminated soils. POCI/AMB/60131/2004. 2005-2008. Coordinator.

BIOSAP - Biotreatment of alternating recalcitrant pollutants in wastewaters (Research Training Networks). 2002 – 2006. European Commission. Coordinator. HPRTN-CT-2002-00213. Coordinator.

MARS – Estudos fundamentais ao MARS -inovador processo de recuperacao por membranas. National funding (FCT). 2003-2004.Team member.

SONATURA - Vapour Phare Bioreactors for Agro-non-Food Insdustries, Projecto LIFE03 ENV/P/000521-financiado pelo Programa LIFE Ambiente da Comunidade Europeia. 2003-2005. Coordinator.

MICOFLORESTA - Tuned mycorrhiza fungi for the production of Pinus Pinaster and Quercus ruber. Programa AGRO, Medida 8 – Desenvolvimento Tecnológico e Demonstração do Programa Operacional Agricultura e Desenvolvimento Rural. 2003 – 2006. Coordinator.

ECOCATCH. Socrates/Erasmus PROG project "Ecological Management of Catchments in Europe". 2006-2009. Coordinator at ESB.

POCTI/DIV/2005/00092 - CI.COM Divulgação de Ciência à Comunidade. 2005-2006. Coordinator.

RACEWAYS. A hyperintensive fish farming concept for lasting competitiveness and superior production. CRAFT project. 2005-2008. Collaboration with Portuguese official team.

BioRecicla – New systems for agro-industrial effluent valorization using microalgae with bimass valorization. National funding (FCT). 2000- 2004. Team member.

FITOREM - Phytoremediation and biofilm reactors for the removal of pollutants fromwastewaters – a comparative study. 2002-2003. National funding (FCT). Coordinator..

CEC - Centre for Experimental Science. CEC - Criação de um Centro Experimental de Ciência - Apoio ao Ensino Experimental das Ciências (Proc. 49686). Fundação Calouste Gulbenkian. 2002-2004. Coordinator.

I9 Ar – Biological treatment technologies for gaseous emissions containing VOC. 2000 –2002. National funding (ICPME – Inovation Agency). Responsible scientist at ESB.

Development of biological systems for decontaminatiom of liquid effluents and groundwater. 1997-2000. National funding (JNICT). Responsible scientist at ESB.

Biological treatment – Phytomicrobial processes – of contaminated sites using the indigenous population. Programa de Investigação Luso-Britânico - Tratado de Windsor. 2000-2002.

Mare Nostrum – Microalgae for the bioremediation of contaminated waters in marine environment. Ambiente e Defesa: Oceano e suas Margens. 1999-2002.Team member.

Biological treatment of alternating compounds derived from the fine chemical industry. Programa de Investigação Luso-Britânico - Tratado de Windsor. 1998-2000.

Thematic Networks Delegate/Group Member

- Thematic Network COST Action - Conceiving Wastewater Treatment in 2020 - Energetic, environmental and economic challenges (water 2020). ESSEM COST Action ES1202. 2012-2016.
- Thematic Network COST Action FA1103 – Endophytes in Biotechnology and Agriculture. FA COST Action FA1103.2011-2015.
- Thematic Network COST 859 - Phytotechnologies to promote sustainable land use and improve food safety. COST. National delegate - Management Comittee. 2004-2008.
- AWARENET - Agro-Food Wastes Reduction Network. ESB representative. EC Growth.
- GRUB'S UP- Recycling and Upgrading Wastes from Food Production for use within the Food Chain. Coordination Action. 2005-2008.
- Thematic Network COST 837 - Plant Biotechnology for the removal of organic pollutants and toxic metals from wastewaters and contaminated sites. COST. National delegate.
- Thematic Network COST 838 - Managing arbuscular mycorrhizal fungi for improving soil quality and plant health in agriculture. COST. National delegate.

PATENTS

M.M.E. Pintado, P.M.L. Castro, C. Piccirillo. UV filters, method of producing the same and their use in composition, in particular sunscreen. Provisional patent submitted to the Institudo Nacional da Propriedade Industrial, 20141000053648.

National Invention Patent No. 105146. High value added extracts pre-Ginjinha obtained from by-products: stems and leaves and their possible applications ". M. M Pintado, S. Dimirey, C. Piccirillo, M. J. M. N. Faria, P. Castro. Universidade Católica Portuguesa and Frutóbidos. 08-06-2010.

International Invention Patent No. 2013057720. Método de obtenção de materiais à base de hidroxiapatite a partir de fonte natural". M. M Pintado, C. Piccirillo, P. Castro, S. Pereira, Ruben Jorge, Isabel Braga da Cruz, Paula Silva, João Vieira. Universidade Católica Portuguesa, Wedotech and Pascoal. 19-10-2011.

PUBLICATIONS

INTERNACIONAL PAPERS WITH PEER REVIEW

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163. Teixeira, M.A.C., Piricillo, C., Tobaldi, D.M., Pullar, R.C., Labrincha, J.A., Ferreira, M.O., Castro, P.M.L., Pintado. M.M.E. Effect of preparation and processing conditions on UV absorbing properties of hydroxyapatite-Fe2O3 sunscreen. Materials Science and Engineering C. http://dx.doi.org/10.1016/j.msec.2016.09.065 (Q1)

162. Amorim, C.L.A., Moreira, I.S., Ribeiro, A.R., Santos, L.H.L.M., Delerue-Matos, C., Tiritan, M.E., Castro, P.M.L. 2016. Treatment of a simulated wastewater amended with a chiral pharmaceuticals mixture by an aerobic granular sludge sequencing batch reactor. International Biodeterioration & Biodegradation 115, pp. 277-285. http://dx.doi.org/10.1016/j.ibiod.2016.09.009 (Q1)

161. Benidire, L., Pereira, S.I.A., Castro, P.M.L., Boularbah, A., 2016. Assessment of plant growth promoting bacterial populations in the rhizosphere of metallophytes from the Kettara mine, Marrakech. Environmental Science Pollution Research (In press). doi:10.1007/s11356-016-7378-6 (Q1)

160. Maia, A.S., Castro, P.M.L., Tiritan, M.E., 2016. Integrated liquid chromatography method in enantioselective studies: Biodegradation of ofloxacin by an activated sludge consortium. Journal Chromatography B 1029-1030, 174–183. doi:10.1016/j.jchromb.2016.06.026 (Q1)

159. Tobaldi, D.M., Piccirillo, C., Rozman, N., Pullar, R.C., Seabra, M.P., Škapin, A.S., Castro, P.M.L., Labrincha, J.A., 2016. Effects of Cu, Zn and Cu-Zn addition on the microstructure and antibacterial and photocatalytic functional properties of Cu-Zn modified TiO2 nano-heterostructures. Journal of Photochemistry and Photobiology A: Chemistry 330, 44–54. doi:10.1016/j.jphotochem.2016.07.016 (Q2)

158. Márquez Brazón, E., Piccirillo, C., Moreira, I.S., Castro, P.M.L., 2016. Photodegradation of pharmaceutical persistent pollutants using hydroxyapatite-based materials. Journal Environmental Management 182, pp. 486–495. doi:10.1016/j.jenvman.2016.08.005 (Q1)

157. Calheiros, C.S.C., Pereira, S.I.A., Brix, H., Rangel, A.O.S.S., Castro, P.M.L. 2016. Assessment of culturable bacterial endophytic communities colonizing *Canna flaccida* inhabiting a wastewater treatment constructed wetland. Ecological Engineering. http://dx.doi.org/10.1016/j.ecoleng.2016.04.002 in press (Q1)

156. Santos, I., Mesquita, R.B.R., Amorim, C.L., Castro, P.M.L. and Rangel, A.O.S.S. (2016) Development of a low pressure chromatographic flow system for monitoring biodegradation of ofloxacin and ciprofloxacin Analytical Methods. Accepted Manuscript. doi: 10.1039/C6AY00476H

155. V.S. Bystrov, C. Piccirillo, D.M. Tobaldi, P.M.L. Castro, J. Coutinho, S. Kopyl, R.C. Pullar. 2016. Oxygen vacancies, the optical band gap (Eg) and photocatalysis of hydroxyapatite: comparing modelling with measured data. Applied Catalysis B: Environmental. 10.1016/j.apcatb.2016.05.014

154. Moreira, H., Pereira, S.I.A., Marques, A.P.G.C., Rangel, A.O.S.S., Castro, P.M.L., 2016. Selection of metal resistant plant growth promoting rhizobacteria for the growth and metal accumulation of energy maize in a mine soil – effect of the inoculum size. Geoderma. 278: 1-16. DOI:10.1016/j.geoderma.2016.05.003.

153. Vanessa R.A. Ferreira, Catarina L. Amorim, Sara M. Cravo, Maria E. Tiritan, Paula M.L. Castro, Carlos M.M. Afonso (2016). Fluoroquinolones biosorption onto microbial biomass: activated sludge and aerobic granular sludge, International Biodeterioration & Biodegradation, 110, 53–60.

152. Sofia I.A. Pereira, Helena Moreira, Konstantinos Argyras, Paula M.L. Castro, Ana P.G.C. Marques. 2016. Promotion of sunflower growth under saline water irrigation by the inoculation of beneficial microorganisms. Applied Soil Ecology 105 (2016) 36–47

151. Monteiro C. M., Calheiros C. S. C., Pimentel-Rodrigues C., Silva-Afonso A., Castro P. M. L. 2015. Contributions to the design of rainwater harvesting systems in buildings with green roofs in a Mediterranean climate. Water Science and Technology, 73.8, pp.1842-1847.

150 S.I.A. Pereira, C. Monteiro, A.L. Vega, P.M.L. Castro. Endophytic culturable bacteria colonizing Lavandula dentata L. plants: isolation, characterization and evaluation of their plant growth-promoting activities. Engineering (2016), pp. 91-97. DOI information: 10.1016/j.ecoleng.2015.11.033

149. Moreira, H., Pereira, S.I.A., Marques, A.P.G.C., Rangel, A.O.S.S., Castro, P.M.L. 2016. Mine land valorization through energy maize production enhanced by the application of plant growth-promoting rhizobacteria and arbuscular mycorrhizal fungi. Environmental Science and Pollution Research. 23: 6940-6950. DOI: 10.1007/s11356-015-5914-4

148. Carvalho, M.F., A.S. Maia, M.E. Tiritan and Castro, PML 2016. Bacterial degradation of moxifloxacin in the presence of acetate as a bulk substrate. Journal of Environmental Management. 219. Volume: 168. DOI information: 10.1016/j.jenvman.2015.12.010

147. C. Piccirillo, R.C. Pullar, D.M. Tobaldi, M.M. Pintado, P.M.L. Castro: “Silver containing calcium phosphate materials of marine origin with antibacterial activity.” *Ceram Internat*. 41, 10152 (2015).

146. Pereira, S.I.A., Pires, C., Henriques, I., Correia, A., Magan, N., Castro, P.M.L. 2015. Assessment of rhizospheric culturable bacteria of *Phragmites australis* and *Juncus effusus* from polluted sites. Journal of Basic Microbiology, 55: 1–12.

145. C. Piccirillo, R.C. Pullar, E. Costa, A. Santos-Silva, M.M. E. Pintado, P.M. L. Castro. 2015. Hydroxyapatite-based materials of marine origin: a bioactivity and sintering study. Materials Science and Engineering C. 51: 309–315.

144. Cristina S. C. Calheiros, Vânia S. Bessa, Raquel B. R. Mesquita, Hans Brix, António O. S. S. Rangel, Paula M. L. Castro. 2015. Constructed wetland with a polyculture of ornamental plants for wastewater treatment at a rural tourism facility. Ecological Engineering. 79 (2015) 1–7. doi:10.1016/j.ecoleng.2015.03.001

143. Nadine R. Sousa, Albina R. Franco, Miguel A. Ramos, Rui S. Oliveira, Paula M.L. Castro. 2015. The response of *Betula pubescens* to inoculation with an ectomycorrhizal fungus and a plant growth promoting bacteria is substrate-dependent. Ecological Engineering. 81, 439–443

142. Ribeiro AR, Gonçalves VMF, Maia AS, Ribeiro C, Castro PML, Tiritan ME. 2015. Development of a dispersive liquid-liquid microextraction method for determination of fluoxetine and metoprolol enantiomers in wastewaters using HPLC-FD. Environmental Chemistry Letters; DOI 10.1007/s10311-015-0498-2

141. L. Romero, C. Piccirillo, P.M.L. Castro, C. Bowman, M.E.A. Warwick, R. Binions. 2015. Titanium Dioxide Thin Films Deposited by Electric Field Assisted Chemical Vapour Deposition: Effect on Antimicrobial and Photocatalytic Properties. Chem. Vap. Deposition 2015, 21, 63–70.

140. Moreira, I.S., Amorim, C.L., Ribeiro, A.R., Mesquita, R.B.R., Rangel, A.O.S.S., van Loosdrecht, M.C.M., Afonso, C.M., Tiritan, M.E. and Castro P.M.L. 2015. Removal of fluoxetine and its effects in the performance of an aerobic granular sludge sequential batch reactor. Journal of Hazardous Materials. 287 (2015) 93–101.

139. Anouk F. Duque, Vânia S. Bessa and Paula M.L. Castro. Characterization of the bacterial communities of aerobic granules in a 2-fluorophenol degrading process. Biotechnology Reports 5:98-104.

138. Piccirillo, C , R.A. Pinto, D.M. Tobaldi, R.C. Pullar, J.A. Labrincha, M.M.E. Pintado, P.M.L. Castro. Light induced antibacterial activity and photocatalytic properties of Ag / Ag3PO4 -based material of marine origin *J. Photochem. Photobiol. A*, 296, 40 (2015).

137. Pereira, S.I.A., Barbosa, L.V., Castro, P.M.L. 2015. Rhizobacteria isolated from a metal polluted area enhance plant growth in zinc and cadmium contaminated soil. International Journal of Environmental Science and Technology, 12: 2127-2142. DOI: 10.1007/s13762-014-0614-z

136. Franco, A., Pereira, S.I.A., Castro, P.M.L. 2015. Effect of benfluralin on *Pinus pinea* seedlings mycorrhized with *Pisolithus tinctorius* and *Suillus bellinii* – study of plant antioxidant response. Chemosphere, 120: 422-430. DOI: 10.1016/j.chemosphere.2014.08.019.

135. Franco, A.R., Castro, P.M.L. 2014. Inoculation of Pinus pinea seedlings with Pisolithus tinctorius and Suillus bellinii promotes plant growth in benfluralin contaminated soil. Plant and Soil. 386 (1-2): 113-123

134. C. Piccirillo, C. Rocha,D.M. Tobaldi, R.C. Pullar, J.A. Labrincha, M.O. Ferreira, P.M.L. Castro, M.M.E. Pintado. Hydroxyapatite-Fe2O3 based material of natural origin as an active sunscreen filter. Journal of Materials Chemistry B. Journal of Materials Chemistry B 2 (36), pp. 5999

133. S.I.A. Pereira, L. Barbosa and P.M.L. Castro. Diversity and characterization of culturable bacterial endophytes from *Zea mays* and their potential as plant growth-promoting agents in metal-degraded soils. Environmental Science Pollution Research. 21: 14110–14123.

132. Ana R Ribeiro; Lúcia HMLM Santos; Alexandra S Maia; Cristina Delerue-Matos; Paula ML Castro; Maria Elizabeth Tiritan. 2014. Enantiomeric fraction evaluation of pharmaceuticals in environmental matrices by liquid chromatography-tandem mass spectrometry. Journal of Chromatography A 1363, 226-235.

131. Albina R. Franco, Nadine R. Sousa, Miguel A. Ramos, Rui S. Oliveira, Paula M.L. Castro. 2014. Diversity and persistence of ectomycorrhizal fungi and their effect on nursery-inoculated Pinus pinaster in a post-fire plantation in Northern Portugal. Microbial Ecology. 68 (4): 761-772

130. C. Piccirillo, R.C. Pullar, D.M. Tobaldi, P.M.L. Castro, M.M.E. Pintado. 2014 Hydroxyapatite and chloroapatite derived from sardine by-products. *Ceram. Internat.*, 40, 13231.

129. Pereira, S.I.A., Barbosa, L.V., Castro, P.M.L. 2015. Rhizobacteria isolated from a metal polluted area enhance plant growth in zinc and cadmium contaminated soil. International Journal Environmental Science and Technology. DOI: 10.1007/s13762-014-0614-z

128. Albina R. Franco, António C. Ferreira, Paula M.L. Castro. 2014. Co-metabolic degradation of mono-fluorophenols by the ectomycorrhizal fungi *Pisolithus tinctorius*. Chemosphere. 111: 260-265.

127. Helena Moreira, Ana P. G. C. Marques, Albina R. Franco, António O. S. S. Rangel, Paula M. L. Castro. 2014. Phytomanagement do Cd contaminated soils using maize (Z. Mays L.) assisted by plant growth promoting rhizobacteria. Environmental Science and Pollution Research. 21 (16) , pp. 9742

126. Irina S Moreira, Ana R Ribeiro, Carlos M Afonso, Maria E Tiritan and Paula ML Castro. 2014. Enantioselective biodegradation of fluoxetine by the bacterial strain Labrys portucalensis F11. Chemosphere. Chemosphere (2014), pp. 103-111

125. Nadine R Sousa; Albina R Franco; Rui S Oliveira; Paula M L Castro. Reclamation of an abandoned burned forest using ectomycorrhizal inoculated *Quercus rubra*. Forest Ecology and Management. 320:50–55.

124. C. Piccirillo, M.P. Seabra, R.C. Pullar, P.M.L. Castro, J.A. Labrincha. 2014. A green synthesis route for Ag-modified nano-titania as an antibacterial agent and photocatalyst. The Journal of Physical Chemistry C. J. Phys. Chem. C, 118, 4751−4766

123. D. Campos, C. Piccirillo, R.C. Pullar, P.M.L. Castro, M.M.E. Pintado. 2014. Characterization and antimicrobial properties of food packaging methylcellulose films containing stem extract of Ginja cherry. Journal of the Science of Food and Agriculture. 94, 2097

122. Sousa, N.R., Ramos, M.A., Marques, A.P.G.C. and Castro, P.M.L. 2014. A genotype dependent-response to cadmium contamination in soil is displayed by Pinus pinaster in symbiosis with different mycorrhizal fungi. Applied Soil Ecology 77, pp. 7-13.

121. Anouk F. Duque, Vânia S. Bessa and Paula M.L. Castro. 2014. Bacterial community dynamics in a rotating biological contactor treating 2-fluorophenol containing wastewater. Journal of Industrial Microbiology and Biotechnology. 41(1): 97-104

120. Ana R. Ribeiro, Alexandra S. Maia, Irina S. Moreira, Carlos M. Afonso, Paula M.L. Castro and Maria E. Tiritan. 2014. Enantioselective quantification of fluoxetine and norfluoxetine by HPLC in wastewater effluents. Chemosphere. 95, 589–596

119. Amorim, C.L., Maia, A.S., Mesquita, R.B.R., Rangel, A.O.S.S., van Loosdrecht, M.C.M., Tiritan, M.E. and Castro, P.M.L. 2014. Performance of aerobic granular sludge in a sequencing batch reactor exposed to ofloxacin, norfloxacin and ciprofloxacin. Water Research. 50, pp. 101-113.

118. Amorim, C.L., Moreira, I.S., Maia, A.S., Tiritan, M.E. and Castro, P.M.L. 2014. Biodegradation of ofloxacin, norfloxacin and ciprofloxacin as single and mixed substrates by Labrys portucalensis F11. Applied Microbiology and Biotechnology, 98 (7), pp. 3181

117. Maia, A.S., Ribeiro, A.R., Amorim, C.L., Barreiro, J., Cass, Q., Castro, P.M.L. and Tiritan, M.E. 2014. Degradation of four fluoroquinolone antibiotics by a bacterial consortium followed by HPLC-FD and LC-MS/MS. Journal of Chromatography A. 1333, 87-98

116. Amorim, C.L., Ferreira, A.C.S., Carvalho, M.F., Afonso, C.M.M. and Castro, P.M.L. 2014. Mineralization of 4-fluorocinnamic acid by a *Rhodococcus* strain. Applied Microbiology and Biotechnology. 98 (4), pp. 1893

115. Ferraro, V., Cruz, B.I., Jorge, R.F., Pintado, M.E., Castro, P.M.L. 2014. Kinetics of release of water and nutrients from codfish (*Gadus morhua* L.) through a heavy salting. Journal of Food Processing and Preservation. 38 (4) , pp. 1772

114. Ferraro, V., Jorge, R.F., Cruz, B.I., Castro, P.M.L., Pintado, M.E. 2014. Recovery of free amino acids and muscle proteins from codfish (*Gadus morhua* L.) salting wastewater by sorption on Amberlite XAD16. Journal of Chemical Technology and Biotechnology. 89 (5) , pp. 671

113. Ferraro, V., Jorge, R.F., Cruz, B.I., Castro, P.M.L., Pintado, M.E. 2014. In-vitro intestinal absorption of amino acids mixtures extracted from codfish (*Gadus morhua* L.) salting wastewater. International Journal of Food Science and Technology. 49 (1), pp. 27.

112. Calheiros, C.S.C., Rangel, A.O.S.S., Castro, P.M.L. 2014. Constructed wetlands for tannery wastewater treatment in Portugal: ten years of experience. International Journal of Phytoremediation. 16:9, 859-870

111. Marques, A.P.G.C., Duque, A.F., Bessa, V., Mesquita, R. Rangel, A.O.S.S, Castro, P.M.L. 2013. Performance of an aerobic granular sequencing batch reactor fed with wastewaters contaminated with Zn^{2+}. Journal Environmental Management. 128, pp. 877-882.

110. Amorim, C.L., Duque, A.F., Afonso, C.M.M., Castro, P.M.L. 2013. Bioaugmentation for treating transient 4-Fluorocinnamic acid shock loads in a rotating biological contactor. Bioresource Technology. 144, pp. 554-562.

109. Ferraro, V., Carvalho, A., Piccirillo, C., Santos, M., Castro, P.M.L., Pintado, M.E. 2013. Extraction of high added value biological compounds from sardine, sardine-type fish and mackerel canning residue - a review. Materials Science and Engineering C 33, pp. 3111-3120.

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