

CURRICULUM VITAE

Personal data

Name and surname: Susana Rodríguez-Couto

Nationality: Spanish

Current position: Full Professor (tenured)

Department of Separation Science,
LUT School of Engineering Science,

LUT University,
Sammonkatu 12,

50130 Mikkeli,

Finland

e-mail: Susana.Rodriguez.Couto@lut.fi

Mobile: +358 503547481

Education

1999

PhD in Chemistry. Department of Chemical Engineering. University of Vigo, Vigo, Spain.

Thesis title: “Production of ligninolytic enzymes in semi-solid-state cultures of *Phanerochaete chrysosporium* and *Phlebia radiata*”.

Grade: *summa cum laude* and extraordinary prize of doctorate.

1994

Diploma of Marine Chemistry. Naval Technical College. University of Cadiz, Cadiz, Spain and Marine Research Institute (IIM), Spanish Council for Scientific Research (CSIC), Vigo, Spain.

1992

BSc and MSc in Chemistry (Industrial Chemistry). Faculty of Chemistry. University of Santiago de Compostela, Santiago de Compostela, Spain.

Scientific Profiles and Citation Metrics

Scopus ID: 1529372 (total documents: 177; **h-index:** 50)

Orcid ID: 0000-0002-2694-5091

Web of Science Researcher ID: U 3919 2019

Professional experience

2019-2021

Independent researcher
Environmental Biotechnology, Spain.

2009-2019

Ikerbasque Research Professor
Ikerbasque, Basque Foundation for Science
Hosting institution: Ceit-IK4, Water & Health Division, Donostia-San Sebastian, Spain.

2004-2008

Ramón y Cajal Senior Research Fellow. Department of Chemical Engineering. Rovira i Virgili University, Tarragona, Spain.

2004

Isidro Parga Pondal Senior Research Fellow. Department of Chemical Engineering. University of Vigo, Vigo, Spain.

2000-2004

Associate Professor. Department of Chemical Engineering. University of Vigo, Vigo, Spain.

2001

Scientific Translator (English-Spanish). SEMANTICS MCI S.L., Vigo, Spain.

2000

Associate Researcher. Department of Chemical Engineering. Institute of Technology. University of Santiago de Compostela, Santiago de Compostela, Spain. Position associated to CYCIT-FEDER-IFD97-0584 Project. “Application of biological sequences for pulp paper bleaching by ligninolytic enzymes”.

Collaborator on practical lessons. Laboratory of Fluids and Heat. Department of Chemical Engineering. University of Santiago de Compostela, Santiago de Compostela, Spain.

1998-1999

Pre-doctoral Fellow. University of Vigo, Vigo, Spain.

Assistant teacher on practical lessons. Engineering of Chemical Reactions (4th Course of Industrial Chemistry) and Technical Chemistry (3rd Course of Chemistry). Department of Chemical Engineering. University of Vigo, Vigo, Spain.

1997-1998

Fellowship at R+D (Research and Development) Office at the University of Vigo. University of Vigo, Vigo, Spain.

Assistant teacher on practical lessons. Engineering of Chemical Reactions (4th Course of Industrial Chemistry). Department of Chemical Engineering. University of Vigo, Vigo, Spain.

1996-1997

Assistant teacher on practical lessons. General Chemistry (1st Course of Industrial Engineering). Department of Chemical Engineering. University of Vigo, Vigo, Spain.

1995-1996

Assistant teacher on practical lessons. Organic Chemistry (2nd Course of Industrial Engineering) and Engineering of Chemical Reactions (4th Course of Industrial Chemistry). Department of Chemical Engineering. University of Vigo, Vigo, Spain.

1994-1995

Assistant teacher on practical lessons. General Chemistry (1st Course of Forestry Technical Engineering). Department of Chemical Engineering. University of Vigo, Vigo, Spain.

1994

Institute of Marine Research. Council for Scientific Research. Vigo, Spain.
Nine months working on the topic “Particulated Organic Carbon” under the direction of Dr. Ricardo Prego Reboredo.

1992-1993

Teacher at a Secondary School. “PP. Somascos” School. La Guardia (Pontevedra), Spain.

Teaching Activities

Undergraduate Degree Programmes

2022-2023

Department of Separation Science, LUT University, Finland

Introduction to Water Treatment Technologies (digital course). Master in Water Technology.

Biological Water Treatment (non-stop online course). Master in Water Technology.

Biological Water Treatment in Biorefineries (non-stop online course). Master in Water Technology.

2021

Department of Separation Science, LUT University, Finland.

Introduction to Water Treatment Technologies (digital course). Master in Water Technology.

2005-2008

Department of Chemical Engineering, Rovira i Virgili University (Tarragona), Spain.

Laboratory of Chemistry II (2nd course of the grade in Chemical Engineering).

Fundamental of Biochemical Engineering II (2nd course of the grade in Biotechnology), coordinator of the subject.

Bioreactors (3rd course of the grade in Biotechnology), coordinator of the subject.

2000-2004

Department of Chemical Engineering, University of Vigo (Vigo), Spain.

Organic Chemistry (2nd course of the 5-year grade in Industrial Engineering).

Chemical Fundamental of Engineering II (1st course of the 5-year grade in Mining Engineering).

General Technical Chemistry (3rd course of the 5-year grade in Chemistry).

Chemical Engineering (4th course of the 5-year grade in Chemistry, Industrial Chemistry).

Engineering of Chemical Reactions (4th course of the 5-year grade in Chemistry, Industrial Chemistry).

Project Development (5th course of the 5-year grade in Chemistry, Industrial Chemistry).

Graduate Degree Programmes

2005-2008

Doctoral Programme in Chemical, Environmental and Process Engineering. Rovira i Virgili University (Tarragona), Spain

2000-2004

Doctoral Programme in Chemical Engineering. University of Vigo, Spain

Professional Memberships

Official College of PhD and BSc in Chemistry, Spain.

European Federation of Biotechnology (EFB)

Publications

- S. Rodríguez** y M.J. Belzunce (1995). El carbono orgánico particulado en los océanos. *Monografías de Química Oceanográfica*, 1: 1-34.
- S. Rodríguez** y M.J. Belzunce (1995). Distribución del carbono orgánico particulado en la costa gallega a principios de otoño. *Cuadernos de Química Oceanográfica*, 1: 1-12.
- J. Pallarés, **S. Rodríguez** y A. Sanromán (1995). Estabilidad operacional de *Aspergillus niger* inmovilizado sobre espumas de poliuretano. *Industria Farmacéutica*, 6: 27-30.
- J. Pallarés, **S. Rodríguez** and A. Sanromán (1996) Citric acid production by immobilized *Apergillus niger* in a fluidized bed reactor. *Biotechnology Techniques*, 10 (1): 53-58.
- S. Rodríguez**, J. Pallarés y A. Sanromán (1996). Efecto de las condiciones operacionales en la producción de polisacáridos. *Afinidad*, LIII (462): 112-116.
- J. Pallarés, **S. Rodríguez** and A. Sanromán (1996). Citric acid production in submerged and solid state culture of *Aspergillus niger*. *Bioprocess Engineering*, 15: 31-33.
- J. Pallarés, **S. Rodríguez** y A. Sanromán (1996). Determinación de las condiciones óptimas de inmovilización de α -amilasa sobre carozo. *Afinidad*, LIII (465): 321-324.
- S. Rodríguez**, Santoro, R., Cameselle, C. and A. Sanromán (1997). Laccase production in semi solid cultures of *Phanerochaete chrysosporium*. *Biotechnology Letters*, 10: 995-998.
- S. Rodríguez**, J. Pallarés y A. Sanromán (1998). Comparación de dos tipos de soportes para la producción de enzimas ligninolíticos por *Phanerochaete chrysosporium* mediante cultivo en estado sólido. *Afinidad*, LV (473): 45-50.
- S. Rodríguez-Couto**, R. Santoro, C. Cameselle and A. Sanromán (1998). Effect of the different parts of the corn cob employed as a carrier on ligninolytic activity in solid state cultures by *P. chrysosporium*. *Bioprocess Engineering*, 18 (4): 251-255.
- S. Rodríguez-Couto** and M. Rättö (1998). Effect of veratryl alcohol and manganese (IV) oxide on ligninolytic activity in semi solid cultures of *Phanerochaete chrysosporium*. *Biodegradation*, 9: 143-150.
- R. Santoro, C. Cameselle, **S. Rodríguez-Couto** and A. Sanromán (1999). Influence of milk, whey, nitrogen and phosphorous concentration on oxalic acid production by *Aspergillus niger*. *Bioprocess Engineering*, 20: 1-5.
- S. Rodríguez-Couto**, M.A. Longo, C. Cameselle and A. Sanromán (1999). Production of manganese peroxidase and laccase in laboratory-scale bioreactors by *Phanerochaete chrysosporium*. *Bioprocess Engineering*, 20: 531-535.
- S. Rodríguez-Couto**, M.A. Longo, C. Cameselle and A. Sanromán (1999). Ligninolytic enzymes from corncob cultures of *Phanerochaete chrysosporium* in semi solid state conditions. *Acta Biotechnologica*, 19: 17-25.
- S. Rodríguez-Couto**, I. Rivela and A. Sanromán (2000). *In vivo* decolourisation of the polymeric dye Poly R-478 by corncob cultures of *Phanerochaete chrysosporium*. *Acta Biotechnologica*, 20: 31-38.

- S. Rodríguez-Couto**, I. Rivela, M.R. Muñoz and A. Sanromán (2000). Stimulation of ligninolytic enzyme production and the ability to decolourise Poly R-478 in semi-solid-state cultures of *Phanerochaete chrysosporium*. *Bioresource Technology*, 74 (2): 159-164.
- S. Rodríguez-Couto**, I. Rivela, M. R. Muñoz and A. Sanromán (2000). Ligninolytic enzymes production and the ability of decolourisation of Poly R-478 in packed-bed bioreactors by *Phanerochaete chrysosporium*. *Bioprocess Engineering*, 23: 287-293.
- I. Rivela, **S. Rodríguez-Couto** and A. Sanromán (2000). Extracellular ligninolytic enzyme production by *Phanerochaete chrysosporium* in a new solid-state bioreactor. *Biotechnology Letters*, 22: 1443-1447.
- S. Rodríguez-Couto**, I. Rivela and A. Sanromán (2001). Design of different bioreactor configurations: Application to ligninolytic enzyme production in semi-solid-state cultivation. *Journal of Chemical Technology and Biotechnology*, 76: 78-82.
- A. Domínguez, **S. Rodríguez-Couto** and A. Sanromán (2001). Amelioration of ligninolytic enzyme production by *Phanerochaete chrysosporium* in airlift bioreactors. *Biotechnology Letters*, 23: 451-455.
- S. Rodríguez-Couto**, M. Rättö, A. Domínguez and A. Sanromán (2001). Strategies for improving ligninolytic enzyme activities in semi-solid-state bioreactors. *Process Biochemistry*, 36: 995-999.
- D.R. Cabaleiro, **S. Rodríguez-Couto**, A. Sanromán and M.A. Longo (2001). Characterisation of deactivating agents and their influence on the stability of MnPs from *Phanerochaete chrysosporium*. *Journal of Chemical Technology and Biotechnology*, 76: 867-872.
- R. Maceiras, **S. Rodríguez-Couto** and A. Sanromán (2001). Influence of several inducers on the synthesis of extracellular laccase and *in vivo* decolourisation of Poly R-478 by semi-solid-state cultures of *Trametes versicolor*. *Acta Biotechnologica*, 21: 255-264.
- S. Rodríguez-Couto**, A. Domínguez and A. Sanromán (2001). Utilisation of lignocellulosic wastes for lignin peroxidase production by semi-solid-state cultures of *Phanerochaete chrysosporium*. *Biodegradation*, 12: 283-289.
- A. Domínguez, I. Rivela, **S. Rodríguez-Couto** and A. Sanromán (2001). Design of a new rotating drum bioreactor for semi-solid-state processes. Application to ligninolytic enzyme production by *Phanerochaete chrysosporium* *Process Biochemistry*, 37: 549-554.
- D.R. Cabaleiro, **S. Rodríguez-Couto**, A. Sanromán and M.A. Longo (2002) Comparison between the protease production ability of ligninolytic fungi in semi-solid-state conditions. *Process Biochemistry*, 37: 1017-1023.
- S. Rodríguez-Couto**, A. Domínguez and A. Sanromán (2002). Photocatalytic degradation of dyes in aqueous solution operating in a fluidised bed reactor *Chemosphere*, 46: 83-86.
- M. Lorenzo, D. Moldes, **S. Rodríguez-Couto**, and A. Sanromán (2002). Improvement in laccase production by employing different lignocellulosic wastes in submerged cultures of *Trametes versicolor*. *Bioresource Technology*, 82: 109-113.

- S. Rodríguez-Couto**, M. Gundín, M. Lorenzo and A. Sanromán (2002). Screening of supports for laccase production by *Trametes versicolor* in semi-solid-state conditions. Determination of optimal operation conditions. *Process Biochemistry*, 38: 249-255.
- S. Rodríguez-Couto**, M. Barreiro, I. Rivela, M.A. Longo and A. Sanromán (2002). Performance of a semi-solid-state immersion bioreactor for ligninolytic enzyme production: Evaluation of different operational variables *Process Biochemistry*, 38: 219-227.
- E. Rosales, **S. Rodríguez-Couto** and A. Sanromán (2002). New uses of food waste: application to laccase production by *Trametes hirsuta*. *Biotechnology Letters*, 24: 701-704.
- S. Rodríguez-Couto**, G. Feijoo, M.T. Moreira and J.M. Lema (2002) Evaluation of the environmental conditions for the continuous production of lignin peroxidase by *Phanerochaete chrysosporium* in fixed-bed bioreactors. *Biotechnology Letters*, 24: 791-794.
- S. Rodríguez-Couto**, A. Domínguez and A. Sanromán (2002). Production of manganese-dependent peroxidase in a new solid-state bioreactor by *Phanerochaete chrysosporium* grown on wood shavings. Application to the decolorization of synthetic dyes. *Folia Microbiologica*, 47: 417-421.
- S. Rodríguez-Couto**, R. Rodríguez, P.P. Gallego and A. Sanromán (2003). Biodegradation of grape cluster stems and ligninolytic enzyme production by *Phanerochaete chrysosporium* during semi-solid-state cultivation. *Acta Biotechnologica*, 23: 62-64.
- D. Moldes, **S. Rodríguez-Couto**, C. Cameselle and A. Sanromán (2003). Study of the degradation of dyes by MnP of *Phanerochaete chrysosporium* grown in a fixed-bed bioreactor. *Chemosphere*, 51: 295-303.
- S. Rodríguez-Couto**, D. Moldes, A. Liébanas and A. Sanromán (2003). Investigation of several bioreactor configurations for laccase production by *Trametes versicolor* operating in solid-state conditions. *Biochemical Engineering Journal*, 15: 21-26.
- D. Moldes, P.P. Gallego, **S. Rodríguez-Couto** and A. Sanromán (2003). Grape seeds: the best lignocellulosic waste to produce laccase by solid state cultures of *Trametes hirsuta*. *Biotechnology Letters*, 25: 491-495.
- G. Rancaño, M. Lorenzo, N. Molares, **S. Rodríguez-Couto** and A. Sanromán (2003). Production of laccase by *Trametes versicolor* in an airlift fermentor. *Process Biochemistry*, 39: 467-473.
- A. Domínguez, N. Moredo, **S. Rodríguez-Couto**, M.A. Sanromán (2003). Change in both morphology and enzymatic production of *Phanerochaete chrysosporium* due to hydraulic shear stress. *Afinidad*. 60: 482-486.
- S. Rodríguez-Couto**, E. Rosales, M. Gundín, M.A. Sanromán (2004). Exploitation of a waste from the brewing industry for laccase production by two *Trametes sp.* *Journal of Food Engineering*, 64: 423-428.
- S. Rodríguez-Couto**, M.A. Sanromán, D. Hofer and G.M. Gübitz (2004). Stainless steel sponge: a novel carrier for the immobilisation of the white-rot fungus *Trametes hirsuta* for decolourisation of textile dyes. *Bioresource Technology*, 95: 67-72.

- S. **Rodríguez-Couto**, D. Hofer, M.A. Sanromán, G.M. Gübitz (2004). Production of laccase by *Trametes hirsuta* grown in an immersion bioreactor. Application to decolourisation of dyes from a leather factory. *Engineering in Life Sciences*, 4: 233-238.
- S. **Rodríguez-Couto** and M.A. Sanromán (2004). Continuous decolourisation of a leather azo dye by *Trametes hirsuta*. *Afinidad*, 61: 460-463.
- E. Rosales, S. **Rodríguez-Couto**, M.A. Sanromán (2005). Reutilization of food processing wastes for enzyme production: application to laccase production by *Trametes hirsuta* under solid-state conditions. *Journal of Food Engineering*, 66: 419-423.
- S. **Rodríguez Couto**, M.A. Sanromán, G.M. Gübitz (2005). Influence of redox mediators and metal ions on synthetic acid dye decolorization by crude laccase from *Trametes hirsuta*. *Chemosphere*, 58: 417-422.
- S. **Rodríguez-Couto** and M.A. Sanromán (2005). Application of solid-state fermentation to ligninolytic enzyme production. A review. *Biochemical Engineering Journal*, 22: 211-219.
- J. Gómez, M. Pazos, S. **Rodríguez-Couto** and M.A. Sanromán (2005). Chestnut shell and barley bran as potential substrates for laccase production by *Coriolopsis rigida* under solid-state conditions. *Journal of Food Engineering*, 68: 315-319.
- S. **Rodríguez-Couto** and M.A. Sanromán (2005). Coconut flesh: a novel raw material for laccase production by *Trametes hirsuta* under solid-state conditions. Application to Lissamine Green B decolorization. *Journal of Food Engineering*, 71: 208-213.
- M. Lorenzo, D. Moldes, S. **Rodríguez-Couto** and M.A. Sanromán (2005). Inhibition of laccase activity from *Trametes versicolor* by heavy metal and organic compounds. *Chemosphere*, 60: 1124-1128.
- A. Domínguez, S. **Rodríguez-Couto** and M.A. Sanromán (2005). Dye decolorization by *Trametes hirsuta* immobilised into alginate beads. *World Journal of Microbiology and Biotechnology*, 21: 405-409.
- S. **Rodríguez-Couto**, D. Moldes and M.A. Sanromán (2006). Optimum stability conditions of pH and temperature for LiP and MnP from *Phanerochaete chrysosporium*. Application to in vitro decolorization of Poly R-478 by MnP. *World Journal of Microbiology and Biotechnology*, 22: 607-612.
- S. **Rodríguez-Couto** and M.A. Sanromán (2006). Effect of two wastes from groundnut processing on laccase production and dye decolorization ability. *Journal of Food Engineering*, 73: 388-393.
- S. **Rodríguez-Couto**, E. López and M.A. Sanromán (2006). Utilisation of grape seeds for laccase production in solid-state fermentors. *Journal of Food Engineering* 74: 263-267.
- S. **Rodríguez-Couto**, E. Rosales and M.A. Sanromán (2006). Decolorization of synthetic dyes by *Trametes hirsuta* in expanded-bed reactors. *Chemosphere*, 62: 1558-1563.

- S. Rodríguez-Couto** and M.A. Sanromán (2006). Application of solid-state fermentation to food industry. A review. *Journal of Food Engineering*, 76: 291-302.
- S. Rodríguez-Couto**, A. Rodríguez, R.R.M. Paterson, N. Lima and J.A. Teixeira (2006). High laccase activity in a 6 l airlift bioreactor by free cells of *Trametes hirsuta*. *Letters in Applied Microbiology*, 42: 612-616.
- G.S. Nyanhongo, **S. Rodríguez-Couto** and G.M. Gübitz (2006). Coupling of 2,4,6-trinitrotoluene (TNT) metabolites onto humic monomers by a new laccase from *Trametes modesta*. *Chemosphere*, 64: 359-370.
- S. Rodríguez-Couto** and J.L. Toca-Herrera (2006). Industrial applications of laccases: A review. *Biotechnology Advances*, 24: 500-513, DOI: 10.1016/j.biotechadv.2006.04.003.
- S. Rodríguez-Couto** and J.L. Toca-Herrera (2006). Inhibitors of laccase enzyme: A review (invitation). *Current Enzyme Inhibition*, 2: 343-354.
- S. Rodríguez-Couto** and J.L. Toca-Herrera (2006). Application of laccases in the textile industry. *Biotechnology and Molecular Biology Reviews*, 1: 117-122.
- S. Rodríguez-Couto** and M^a Á. Sanromán (2007). The effect of violuric acid on the decolourization of recalcitrant dyes by laccase from *Trametes hirsuta*. *Dyes and Pigments*, 74: 123-126.
- M. Lorenzo, **S. Rodríguez-Couto** and M.A. Sanromán (2007). Enhanced production of laccase by *Trametes versicolor*: Effect on dyes decolourisation. *Afinidad*, 64: 25-30.
- E. Rosales, **S. Rodríguez-Couto** and M.A. Sanromán (2007). Increased laccase production by *Trametes hirsuta* grown on ground orange peelings. *Enzyme and Microbial Technology*, 40: 1287-1290.
- J.F. Osma, M^a V. Saravia, J.L. Toca-Herrera and **S. Rodríguez-Couto** (2007). Mandarin peelings: the best carbon source to produce laccase by static cultures of *Trametes pubescens*. *Chemosphere*, 67: 1677-1680.
- J.F. Osma, J.L. Toca Herrera and **S. Rodríguez-Couto** (2007). Banana skin: a novel waste for laccase production by *Trametes pubescens* under solid-state conditions. Application to synthetic dye decolouration. *Dyes & Pigments*, 75: 32-37.
- M. Schröder, L. Pereira, **S. Rodríguez-Couto**, A. Erlacher, K.-U. Schöning, A. Cavaco-Paulo and G.M. Gübitz (2007). Enzymatic synthesis of Tinuvin. *Enzyme and Microbial Technology*, 40: 1748-1752.
- S. Rodríguez-Couto** (2007). Laccase from *Trametes hirsuta* grown on paper cuttings. Application to synthetic dye decoloration at different pHs. *Engineering in Life Sciences*, 7: 229-234.
- J.F. Osma, M^a V. Saravia, J.L. Toca Herrera and **S. Rodríguez-Couto** (2007). Sunflower seed shells: a novel and effective low-cost adsorbent for the removal of the diazo dye Reactive Black 5 from aqueous solutions. *Journal of Hazardous Materials*, 147: 900-905.

- S. Rodríguez-Couto** (2007). Decolouration of industrial azo dyes by crude laccase from *Trametes hirsuta*. *Journal of Hazardous Materials*, 148: 768-770.
- S. Rodríguez-Couto**, J.F. Osma, M^a V. Saravia, G.M. Gübitz and J.L. Toca-Herrera (2007). Coating of immobilised laccase for stability enhancement: a novel approach. *Applied Catalysis A: General*, 329: 156-160, DOI: 10.1016/j.apcata.2007.07.001.
- J.F. Osma, **S. Rodríguez-Couto** and J.L. Toca-Herrera (2007). Effect of different organic nitrogen sources on laccase production by *Trametes pubescens*. *Journal of Biotechnology*, 131S: S226.
- J.F. Osma, **S. Rodríguez-Couto** and J.L. Toca-Herrera (2007). Poly-R-478 and ABTS oxidation by the white-rot fungus *Trametes pubescens* on agar plates. *Journal of Biotechnology*, 131S: S229.
- S. Rodríguez-Couto** and J.L. Toca-Herrera (2007). Laccase production at reactor scale by filamentous fungi. *Biotechnology Advances*, 25: 558-569.
- S. Rodríguez-Couto** and J.L. Toca-Herrera (2007). Laccases in pollution control (invitation). *Terrestrial and Aquatic Environmental Toxicology*, 1: 34-45.
- S. Rodríguez-Couto** (2008). Exploitation of biological wastes for the production of value-added products under solid-state fermentation conditions. *Biotechnology Journal*, 3: 859-870.
- L. Jiménez, I. Katakis, A. Fabregat, T. Schafer, **S. Rodríguez**, J.M. Mateo, M. Giamberini, B. Rivera, P. Argüeso, E. Calero, L. Vico, F. Hernandez, R. Genc, M. Medir, J.R. Alabart and G. Guillén-Gosálbez (2008). CAPE tools in biotechnology: why, when, what, who, which ones and where? *Computer Aided Chemical Engineering*, 25: 1181-1186.
- K. Enayatzamir, H.A. Alikhani and **S. Rodríguez-Couto** (2009). Simultaneous production of laccase and decolouration of the diazo dye Reactive Black 5 in a fixed-bed bioreactor. *Journal of Hazardous Materials*, 164: 296-300.
- R. Genc and **S. Rodríguez-Couto** (2009). Using biotechnology in the laboratory: using an immobilized-laccase reactor-system to learn about wastewater treatment. *Biochemistry and Molecular Biology Education*, 37: 182-185.
- S. Rodríguez-Couto** (2009). Removal of dyes by immobilised fungi. *Biotechnology Advances*, 27: 227-235.
- S. Rodríguez-Couto**, J.F. Osma and J.L. Toca-Herrera (2009). Removal of synthetic dyes by an eco-friendly strategy. *Engineering in Life Sciences*, 9: 116-123.
- K. Enayatzamir, H.A. Alikhani and **S. Rodríguez-Couto** (2009). Assessment of the joint effect of laccase and cellobiose dehydrogenase on the decolouration of synthetic dyes. *Journal of Hazardous Materials*, 169: 176-181.
- M.S. Roriz, J.F. Osma, J.A. Teixeira and **S. Rodríguez-Couto** (2009). Application of response surface methodological approach to optimise Reactive Black 5 decolouration by laccase from *Trametes pubescens*. *Journal of Hazardous Materials*, 169: 691-696, DOI: 10.1016/j.jhazmat.2009.03.150.
- K. Enayatzamir, H.A. Alikhani, F. Tabandeh, B. Yakhchali, L. Mohammadi and **S. Rodríguez-Couto** (2009). Combined action of laccase and cellobiose dehydrogenase for the decolouration of the azo dye Ponceau Xylidine R. *New Biotechnology*, 25S: S152.

- S. **Rodríguez-Couto** (2009). Enzymatic biotransformation of synthetic dyes (invitation). *Current Drug Metabolism*, 10: 1048-1054.
- K. Enayatzamir, B. Yakhchali, F. Tabandeh and S. **Rodríguez-Couto** (2010). Decolouration of azo dyes by *Phanerochaete chrysosporium* immobilised into alginate beads. *Environmental Science and Pollution Research*, 17: 145-153.
- J.F. Osma, J.L. Toca-Herrera and S. **Rodríguez-Couto** (2010). Biodegradation of a simulated textile effluent by immobilised-coated laccase in laboratory-scale reactors. *Applied Catalysis A: General*, 373: 147-153, DOI: 10.1016/j.apcata.2009.11.009.
- U. Moilanen, J.F. Osma, E. Winquist, M. Leisola and S. **Rodríguez-Couto** (2010). Decolorization of simulated textile dye baths by crude laccases from *Trametes hirsuta* and *Cerrena unicolor*. *Engineering in Life Sciences*, 10: 242-247, DOI: 10.1002/elsc.200900095.
- J.F. Osma, J.L. Toca-Herrera and S. **Rodríguez-Couto** (2010). Transformation pathway of Remazol Brilliant Blue R by immobilised laccase. *Bioresource Technology*, 101: 8509-8514.
- J.F. Osma, J.L. Toca-Herrera and S. **Rodríguez-Couto** (2010). Uses of laccases in the food industry. *Enzyme Research*, DOI:10.4061/2010/918761.
- J.F. Osma, J.L. Toca-Herrera and S. **Rodríguez-Couto** (2011). Environmental, scanning electron and optical microscope image analysis software for determining volume and occupied area of solid-state fermentation fungal cultures. *Biotechnology Journal*, 6: 45-55.
- J.F. Osma, U. Moilanen, J.L. Toca-Herrera and S. **Rodríguez-Couto** (2011). Morphology and laccase production of white-rot fungi grown on wheat bran flakes under semi-solid-state fermentation conditions. *FEMS Microbiology Letters*, 318: 27-34.
- R. Genc and S. **Rodríguez-Couto** (2011). Production of a Biopolymer at bioreactor scale: a Laboratory Class Experience. *Journal of Chemical Education*, 88: 1175-1177.
- J.F. Osma, J.L. Toca-Herrera and S. **Rodríguez-Couto** (2011). Cost analysis in laccase production. *Journal of Environmental Management*, 92: 2907-2912, DOI: 10.1016/j.jenvman.2011.06.052.
- S. **Rodríguez-Couto** (2011). Production of laccase and decolouration of the textile dye Remazol Brilliant Blue R in temporary immersion bioreactors. *Journal of Hazardous Materials*, 194: 297-302, DOI: 10.1016/j.jhazmat.2011.07.098.
- N. Enayatzamir, F. Tabandeh, S. **Rodríguez-Couto**, B. Yakhchali, H.A. Alikhani and L. Mohammadi (2011). Biodegradation pathway and detoxification of the diazo dye Reactive Black 5 by *Phanerochaete chrysosporium*. *Bioresource Technology*, 102: 10359-10362.
- S. **Rodríguez-Couto** (2012). Laccases for denim bleaching: an eco-friendly alternative. *The Open Textile Journal*, 5: 1-7.
- O. Rubilar, G.R. Tortella, R. Cuevas, M. Cea, S. **Rodríguez-Couto** and M.C. Diez (2012). Adsorptive removal of pentachlorophenol by *Anthracophyllum discolor* in a fixed-bed column. *Water, Air, & Soil Pollution*, 223: 2463-2472.

- S. Rodríguez-Couto** (2012). A promising inert support for laccase production and decolouration of textile wastewater by the white-rot fungus *Trametes pubescens*. *Journal of Hazardous Materials*, 233-234: 158-162.
- F. Sheikhi, M.R. Ardakani, N. Enayatzamir and **S. Rodríguez-Couto** (2012). The determination of assay for laccase of *Bacillus subtilis* WPI with two classes of chemical compounds as substrates. *Indian Journal of Microbiology*, 52: 701-707.
- I. Machado, J.A. Teixeira and **S. Rodríguez-Couto** (2013). Semi-solid-state fermentation: a promising alternative for neomycin production by the actinomycete *Streptomyces fradiae*. *Journal of Biotechnology*, 165: 195-200.
- P. Sathishkumar, K. Balan, T. Palvannan, S. Kamala-Kannan, B.-T. Oh and **S. Rodríguez-Couto** (2013). Efficiency of *Pleurotus florida* laccase on decolorization and detoxification of the Reactive dye Remazol Brilliant Blue R (RBBR) under optimized conditions. *Clean-Soil, Air, Water*, 41: 665-672.
- O. Benzina, D. Daassi, H. Zouari-Mechichi, F. Frikha, S. Woodward, L. Belbahri, **S. Rodríguez-Couto** and T. Mechichi (2013). Decolourization and detoxification of two textile industry effluents by the laccase-1-hydroxybenzotriazol system. *Environmental Science and Pollution Research*, 20: 5177-5187.
- S. Rodríguez-Couto** (2013). Treatment of textile wastewater by white-rot fungi: still a far away reality? (invitation). *Textiles and Light Industrial Science and Technology*, 2: 113-119.
- D. Daassi, T. Mechichi, M. Nasri and **S. Rodríguez-Couto** (2013). Decolorization of the metal textile dye Lanaset Grey G. *Journal of Environmental Management*, 129: 324-332.
- D. Daassi, **S. Rodríguez-Couto**, M. Nasri and T. Mechichi (2014). Biodegradation of textile dyes by immobilized laccase from *Coriolopsis gallica* into Ca-alginate beads. *International Biodeterioration & Biodegradation*, 90: 71-78.
- S. Rodríguez-Couto**, A. Arzac, G.P. Leal and R. Tomovska (2014). Reduced graphene oxide hydrogels and xerogels provide efficient platforms for immobilization and laccase production by *Trametes pubescens*. *Biotechnology Journal*, 9: 578-584.
- B. Heibati, **S. Rodríguez-Couto**, A. Amrane, M. Rafatullah, A. AlHawari and M.A. Al-Ghouti (2014). Uptake of Reactive Black 5 by pumice and walnut activated carbon: Chemistry and adsorption mechanisms. *Journal of Industrial and Engineering Chemistry*, 20: 2939-2947.
- L. Gioia, C. Manta, K. Ovsejevi, J. Burgueño, P. Menéndez and **S. Rodríguez-Couto** (2014). Enhancing laccase production by a newly-isolated strain of *Pycnoporus sanguineus* with high potential for dye decolouration. *RSC Advances*, 4: 34096-34103, DOI: 10.1039/C4RA06039C.
- S. Rodríguez-Couto** (2014). Decolouration of industrial metal-complex dyes in successive batches by active cultures of *Trametes pubescens*. *Biotechnology Reports*, 4: 156-160.
- I. Machado, V.R. Kaberdin and **S. Rodríguez-Couto** (2014). Neomycin production revisited (invitation). *Journal of Applied Biopharmaceutics and Pharmacokinetics*, 2: 21-28, DOI: 10.14205/2309-4435.2014.02.01.3.

- L. Gioia, **S. Rodríguez-Couto**, P. Menéndez, C. Manta and K. Ovsejevi (2015). Reversible covalent immobilization of *Trametes villosa* laccase onto thiol-sulfinate-agarose: an insoluble biocatalyst with potential for decolouring recalcitrant dyes. *Biotechnology and Applied Biochemistry*, 62: 502-513, DOI: 10.1002/bab.1287.
- L. Badiefar, B. Yakhchali, **S. Rodríguez-Couto**, A. Veloso, J.M García-Arenzana, Y. Matsumura and M. Khodabandeh (2015). Biodegradation of bisphenol A by the newly-isolated *Enterobacter gergoviae* strain BYK-7 enhanced using genetic manipulation. *RSC Advances*, 5: 29563-29572, DOI: 10.1039/c5ra01818h.
- B. Heibati, **S. Rodríguez-Couto**, M.A. Al-Ghouti, M. Asif, I. Tyagi, S. Agarwal and V.K. Gupta (2015). Kinetics and thermodynamics of enhanced adsorption of the dye AR 18 using activated carbons prepared from walnut and poplar woods. *Journal of Molecular Liquids*, 208: 99-105, DOI: 10.1016/j.molliq.2015.03.057.
- N. Ormategui, A. Veloso, G.P. Leal, **S. Rodríguez-Couto** and R. Tomovska (2015). Design of stable and powerful nanobiocatalysts, based on enzyme laccase immobilized on self-assembled 3D/polymer composite hydrogels. *ACS Applied Materials and Interfaces*, 7: 14104-14112, DOI:10.1021/acsami.5b03325.
- B. Heibati, **S. Rodríguez-Couto**, N.G. Turan, O. Ozgonenel, A.B. Albadarin, M. Asif, I. Tyagi, S. Agarwal and V.K. Gupta (2015). Removal of noxious dye Acid Orange 7 from aqueous solution using natural pumice and Fe-coated pumice stone. *Journal of Industrial and Engineering Chemistry*, 32: 124-131, DOI: 10.1016/j.jiec.2015.06.016.
- B. Heibati, **S. Rodríguez-Couto**, O. Ozgonenel, N.G. Turan, A. Aluigi, M.A. Zazouli, M.G. Ghozikali, M. Mohammadyan and A.B. Albadarin (2015). A modeling study by artificial neural network on Ethidium Bromide adsorption optimization using natural pumice and iron-coated pumice. *Desalination and Water Treatment*, 57: 13472-13483, DOI: 10.1080/19443994.2015.1060906.
- B. Heibati, K. Yetilmezsoy, M. Ali-Zazouli, **S. Rodríguez-Couto**, I. Tyagi, S. Agarwal and V.K. Gupta (2016). Adsorption of Ethidium Bromide (EtBr) from aqueous solutions by natural pumice and aluminium-coated pumice. *Journal of Molecular Liquids*, 213: 41-47.
- D. Daâssi, H. Zouari-Mechich, F. Frikha, **S. Rodríguez-Couto**, M. Nasri and T. Mechichi (2016). Sawdust waste as a low-cost support-substrate for laccases production and adsorbent for azo dyes decolorization. *Journal of Environmental Health Science & Engineering*, 14: 1-12, DOI: 10.13140/RG.2.1.1852.5204.
- S. Agarwal, I. Tyagi, V.K. Gupta, M.H. Dehghani, A. Bagheri, K. Yetilmezsoy, A. Amrane, B. Heibati and **S. Rodríguez-Couto** (2016). Degradation of azinphos-methyl and chlorpyrifos from aqueous solutions by ultrasound treatment. *Journal of Molecular Liquids*, 221: 1237-1242. DOI: 10.1016/j.molliq.2016.04.076.
- D. Daâssi, S. Sellami, F. Frikha, **S. Rodríguez-Couto**, M. Nasri and T. Mechichi (2016). Assessment of *Coriopsis gallica*-treated olive mill wastewater phytotoxicity on tomato plants. *Environmental Science & Pollution Research*, 23: 15370-15380, DOI: 10.1007/s11356-016-6615-3.

- I. Montánchez, A. Chao-Kaberdina, E. Sevillano, L. Gallego, **S. Rodríguez-Couto** and V. Kaberdin (2017). Isolation of *Pseudomonas fluorescens* species highly resistant to pentachlorobenzene. *Folia Microbiologica*, 62: 325-334, DOI 10.1007/s12223-017-0501-3.
- R. Yehia and **S. Rodríguez-Couto** (2017). Discoloration of the azo dye Congo Red by manganese-dependent peroxidase from *Pleurotus sajor caju*. *Applied Biochemistry and Microbiology*, 53: 222-229, DOI: 10.1134/S0003683817020181.
- S. Rodríguez-Couto** (2017). Industrial and environmental applications of white-rot fungi (invitation). *Mycosphere*, 8: 456-466, DOI: 10.5943/mycosphere/8/3/7.
- M. Harir, B. Miloud, F. Zohra, J.M. García-Arenzana, A. Veloso and **S. Rodríguez-Couto** (2017). Isolation and characterization of actinobacteria from Algerian Sahara soils with antimicrobial activities. *International Journal of Molecular and Cellular Medicine*, 6: 109-120, DOI: 10.22088/acadpub.BUMS.6.2.5.
- S. Agarwal, I. Tyagi, V.K. Gupta, M.H. Dehghani, A. Bagheri, K. Yetilmezsoy, A. Amrane, B. Heibati and **S. Rodriguez-Couto** (2017). Corrigendum to “Degradation of azinphos-methyl and chlorpyrifos from aqueous solutions by ultrasound treatment” [J. Mol. Liq. 221 (September 2016) 1237–1242]. *Journal of Molecular Liquids*, DOI: 10.1016/j.molliq.2017.08.102.
- N. Srivastava, M. Srivastava, P.K. Mishra, V.K. Gupta, G. Molina, **S. Rodriguez-Couto**, A. Manikanta and P.W. Ramteke (2018). Applications of fungal cellulases in biofuel production: advances and limitations. *Renewable & Sustainable Energy Reviews*, 82: 2379-2386.
- H. Biglari, **S. Rodriguez-Couto**, Y.O. Khaniabadi, H. Nourmoradi, M. Khoshgoftar, A. Amrane, M. Vosoughi, S. Esmaeili, R. Heydari, M.J. Mohammadi and R. Rashidi (2018). Cationic surfactant-modified clay as an adsorbent for the removal of synthetic dyes from aqueous solutions. *International Journal of Chemical Reactor Engineering*, 16, DOI: 10.1515/ijcre-2017-0064.
- M.A. Zazouli, L.R. Kalankesh, **S. Rodríguez-Couto** and A. Keshavarz (2018). Effect Urmia Lake’s drying on groundwater corrosion and scaling potential in the northwest of Iran (Case study: Spring and summer, 2015). *Environmental Quality Management*, 27: 65-72, DOI: 10.1002/tqem.21562.
- B. Ghariani, B. Hadrich, I. Louati, R. Mitbaa, D. Daassi, **S. Rodriguez-Couto**, M. Nasri and T. Mechichi (2019). Porous heat-treated fungal biomass: preparation, characterization and application for removal of textile dyes from aqueous solutions. *Journal of Porous Materials*, 26: 1475-1488, DOI: 10.1007/s10934-019-00746-6.
- F. Lassouane, H. Aït-Amar, S. Amrani and **S. Rodríguez-Couto** (2019). A promising laccase immobilization approach for Bisphenol A removal from aqueous solutions. *Bioresource Technology*, 271: 360-367, DOI: 10.1016/j.biortech.2018.09.129.
- N.M. Khalil, M.N. Abd El-Ghany and **S. Rodríguez-Couto** (2019). Antifungal and anti-mycotoxin efficacy of biogenic silver nanoparticles produced by *Fusarium chlamydosporum* and *Penicillium chrysogenum* at non-cytotoxic doses. *Chemosphere*, 218: 477-486, DOI: 10.1016/j.chemosphere.2018.11.129.

- L.R. Kalankesh, **S. Rodríguez-Couto**, Y.D. Shahamat and H.A. Asgarnia (2019). Removal efficiency of nitrate, phosphate, fecal and total coliforms by horizontal subsurface flow-constructed wetland from domestic wastewater. *Environmental Health, Engineering and Management Journal*, 6: 105-111, DOI: 10.15171/EHEM.2019.12.
- M.R. Khani, H. Kuhestani, L.R. Kalankesh, B. Kamarehei, **S. Rodríguez-Couto**, M.M. Baneshi and Y.D. Shahamat (2019). Rapid and high purification of olive mill wastewater (OMV) with the combination electrocoagulation/catalytic sonoperoxone processes. *Journal of the Taiwan Institute of Chemical Engineers*, 97: 47-53, DOI: 10.1016/j.jtice.2019.02.003.
- B.P. Singh, M.E. Rateb, **S. Rodríguez-Couto**, M.L. Teixeira de Moraes Polizeli and W.J. Li (2019). Editorial: Microbial Secondary Metabolites: Recent Developments and Technological Challenges. *Frontiers in Microbiology*, 10: 914, DOI: 10.3389/fmicb.2019.00914.
- M. Harir, H. Bendif, M. Yahiaoui, B.M. Bellahcene, F. Zohra and **S. Rodríguez-Couto** (2019). Evaluation of antimicrobial activity of *Terfezia arenaria* extracts collected from Saharan desert against bacteria and filamentous fungi. *3Biotech*, 9: 281, DOI: 10.1007/s13205-019-1816-3.
- L.R. Kalankesh, **S. Rodríguez-Couto** and M.A. Zazouli (2019). Desalination and power generation of Caspian Sea by applying new designed microbial desalination cells in batch operation mode. *Environmental Progress & Sustainable Energy*, 38: 13205, DOI: 10.1002/ep.13205.
- L.R. Kalankesh, **S. Rodríguez-Couto**, M.A. Zazouli, Y.D. Shahamat, R.A. Dianati and M. Arghiani, (2019). Synthesis and characterization of nano materials and composites as bactericides. *Journal of Microbiological Methods*, 167: 105736, DOI: 10.1016/j.mimet.2019.105736.
- L.R. Kalankesh, **S. Rodríguez-Couto**, M.A. Zazouli, M. Moozazadeh and S. Mousavinasab (2019). Do disinfection byproducts in drinking water have an effect on human cancer risk worldwide? A meta-analysis. *Environmental Quality Management*, 29: 105-119, DOI: 10.1002/tqem.21661.
- G. Zeydouni, **S. Rodríguez-Couto**, H. Nourmoradi, H. Basiri, P. Amoatey, S. Esmaili, S. Saeidi, F. Keishams, M. J. Mohammadi and Y.O. Khaniabadi (2020). H₂SO₄ modified Aloe Vera leaf shells for the removal of *p*-chlorophenol and Methylene blue from aqueous environment. *Toxin Reviews*, 39: 57-67, DOI: 10.1080/15569543.2018.1478857.
- N. Nasseh, T.J. Al-Musawi, M. Miri, **S. Rodríguez-Couto** and A.H. Panahi (2020). A comprehensive study on the application of FeNi₃@SiO₂@ZnO magnetic nanocomposite as a novel photocatalyst for the photocatalytic degradation of tamoxifen in the presence of simulated sunlight. *Environmental Pollution*, 261: 114127, DOI: 10.1016/j.envpol.2020.114127.
- N. Nasseh, F.S. Arghavan, **S. Rodríguez-Couto**, A.H. Panahi, M. Esmati and T.J. Al-Musawi (2020). Preparation of activated carbon@ZnO composite and its application as a novel catalyst in catalytic ozonation process for metronidazole degradation. *Advanced Powder Technology* 31: 875-885, DOI: 10.1016/j.appt.2019.12.006.

- A.H. Panahi, M. Kamranifar, M.H. Moslehi, **S. Rodríguez-Couto** and N. Nasseh (2020). Synthesis and characterization of FeNi₃ nanoparticles and their application as catalysts for penicillin G degradation in a Fenton-like reaction. *Desalination and Water Treatment*, 181: 391-398, DOI: 10.5004/dwt.2020.25122.
- B. Dayi, C. Onac, A. Kaya, H.A. Akdogan and **S. Rodríguez-Couto** (2020). New type biomembrane: transport and biodegradation of reactive textile dye. *ACS Omega*, 5: 9813-9819, DOI: 10.1021/acsomega.9b04433.
- M. Khodadadi, F.S. Arghavan, **S. Rodríguez-Couto** and A.H. Panahi (2020). Synthesis and characterization of FeNi₃@SiO₂@TiO₂ nano-composite and its application as a catalyst in a photochemical oxidation process to decompose tetracycline antibiotic. *Desalination and Water Treatment*, 195: 435-449, DOI: 10.5004/dwt.2020.25870.
- M.C.S. Barcelos, C.L. Ramos, M. Kuddus, **S. Rodríguez-Couto**, N. Srivastava, P.W. Ramteke, P.K. Mishra and G. Molina (2020). Enzymatic potential for the bioactive valorization of agro-industrial by-products. *Biotechnology Letters*, 42: 1799-1827, DOI: 10.1007/s10529-020-02957-3.
- D.R. Tilaki, L.R. Kalankesh, S. Bavandi, I. Babanejad, J.Y. Charati and **S. Rodríguez-Couto** (2020). Surfactant modified kaolinite (MK-BZK) as an adsorbent for the removal of diazinon from aqueous solutions. *Desalination and Water Treatment*, 196: 137-145, DOI: 10.5004/dwt.2020.25922.
- D.R. Tilaki, L.R. Kalankesh, S. Bavandi, I. Babanejad, J.Y. Charati and **S. Rodríguez-Couto** (2020). Corrigendum to “Surfactant modified kaolinite (MK-BZK) as an adsorbent for the removal of diazinon from aqueous solutions” [*Desalin. Water Treat.* (August 2020) 137-145]. *Desalination and Water Treatment*, 201: 463, DOI: 10.5004/dwt.2020.26667.
- S. Ahmadi, A. Rahdar, C.A. Igwegbe, S. Mortazavi-Derazkola, A.M. Banach, S. Rahdar, A.K. Singh, **S. Rodríguez-Couto** and G.Z. Kyzass (2020). Praseodymium-doped cadmium tungstate (CdWO₄) nanoparticles for dye degradation with sonocatalytic process. *Polyhedron*, 190: 114792, DOI: 10.1016/j.poly.2020.114792.
- A.A. Yaqoob, M.N.M. Ibrahim and **S. Rodríguez-Couto** (2020). Development and modification of materials to build cost-effective anodes for microbial fuel cells (MFCs): An overview. *Biochemical Engineering Journal*, 164: 107779, DOI: 10.1016/j.bej.2020.107779.
- H. Mahdizadeh, Y.D. Shahamat and **S. Rodríguez-Couto** (2021). Discoloration and mineralization of a textile azo dye using a hybrid UV/O₃/SBR process. *Applied Water Science*, 11: 159, DOI: 10.1007/s13201-021-01479-1.
- S. Samadi, B. Asgari Lajayer, E. Moghiseh and **S. Rodríguez-Couto** (2021). Effect of carbon nanomaterials on cell toxicity, biomass production, nutritional and active compound accumulation in plants. *Environmental Technology & Innovation*, 21: 101323, DOI: 10.1016/j.eti.2020.101323.
- N.M. Khalil, **S. Rodríguez-Couto** and M.N. Abd El-Ghany (2021). Characterization of *Penicillium crustosum* L-asparaginase and its acrylamide alleviation efficiency in roasted coffee beans at non-cytotoxic levels. *Archives of Microbiology*, 203: 2625-2637, DOI: 10.1007/s00203-021-02198-6.

- M. Bilal, S.A. Qamar, S.S. Ashraf, **S. Rodríguez-Couto** and H.M.N. Iqbal (2021). Robust nanocarriers to engineer nanobiocatalysts for bioprocessing applications. *Advances in Colloid and Interface Science*, 293: 102438, DOI: 10.1016/j.cis.2021.102438.
- M.P. Shah and **S. Rodríguez-Couto** (2021) Preface, Wastewater Treatment Reactors, Shah, M.P., Rodríguez-Couto, S. (Eds.), Elsevier, p. xxv, ISBN 9780128239919, DOI: 10.1016/B978-0-12-823991-9.00030-7.
- A.A. Yaqoob, M.N.M. Ibrahim, **S. Rodríguez-Couto** and A. Ahmad (2021). Preparation, characterization, and application of modified carbonized lignin as an anode for sustainable microbial fuel cell. *Process Safety and Environmental Protection*, 155: 49-60, DOI: 10.1016/j.psep.2021.09.006.
- M.K.A. Ansari, O. Lastochkina, M. Iqbal, A.A. Ansari, T. Fatma, **S. Rodríguez-Couto** and G. Owens (2021). Laccase – The wonder enzyme for a variety of industries. *Acta Scientific Microbiology*, 4: 12.
- N. Nasseh, F.S. Arghavan, **S. Rodríguez-Couto** and A.H. Panahi (2022). Synthesis of FeNi₃/SiO₂/CuS magnetic nano-composite as a novel adsorbent for Congo Red dye removal. *International Journal of Environmental Analytical Chemistry*, 102: 2342-2362, DOI:10.1080/03067319.2020.1754810.
- N. Delangiz, S. Aliyar, N. Pashapoor, K. Nobaharan B.A. Lajayer, and **S. Rodríguez-Couto** (2022). Can polymer-degrading microorganisms solve the bottleneck of plastics' environmental challenges? *Chemosphere*, 294: 133709, DOI: 10.1016/j.chemosphere.2022.133709.
- M.P. Shah, R. Banarjee and **S. Rodríguez-Couto** (2022). Special issue: Emerging microbial technologies for wastewater treatment. *Journal of Basic Microbiology*, 62: 199-200, DOI: 10.1002/jobm.202200133.
- L.R. Kalankesh, **S. Rodríguez-Couto**, A. Alami, S. Khosravan, M. Meshki, E. Ahmadov, A. Mohammadpour and N. Bahri (2022). Socio-environmental determinants and human health exposures in arid and semi-arid zones of Iran-Narrative Review. *Environmental Health Insights*, 16, DOI: 10.1177/11786302221089738.
- H.M.N. Iqbal, M. Bilal and **S. Rodríguez-Couto** (2022). Smart nanohybrid constructs: Concept and designing for environmental remediation. *Chemosphere*, 301: 134616, DOI: 10.1016/j.chemosphere.2022.134616.
- A.M. Othman, **S. Rodríguez-Couto** and T. Mechichi (2022). Editorial: Microbial Laccases: Recent Advances and Biotechnological Applications. *Frontiers in Bioengineering and Biotechnology*, 10: 922223, DOI: 10.3389/fbioe.2022.922223.
- F. Firoozeh, Y.D. Shahamat, **S. Rodríguez-Couto**, E. Kouhsari and F. Niknejad (2022). Bioremediation for the decolorization of textiles dyes by bacterial strains isolated from dyeing wastewater. *Jordan Journal of Biological Sciences*, 15: 219-225, DOI: 10.54319/jjbs/150209.
- F. Lassouane, H. Aït-Amar and **S. Rodríguez-Couto** (2022). High BPA removal by immobilized crude laccase in a batch fluidized bed bioreactor. *Biochemical Engineering Journal*, 184: 108489, DOI: 10.1016/j.bej.2022.108489.

- S.A.H. Hamdi, G.M. Ghonaim, R.R. El Sayed, **S. Rodríguez-Couto** and M.N. Abd El-Ghany (2022). Bioprocess of astaxanthin extraction from shrimp waste via the common microorganisms *Saccharomyces cerevisiae* and *Lactobacillus acidophilus* in comparison to the chemical method. *Biomass Conversion and Biorefinery*, DOI: 10.1007/s13399-022-02984-2.
- J. Hernández-Fernández, H. Cano and **S. Rodríguez-Couto** (2022). Quantification and removal of volatile sulfur compounds (VSCs) in atmospheric emissions in large (petro) chemical complexes in different countries of America and Europe. *Sustainability*, 14(18): 11402, DOI: 10.3390/su141811402.
- K.V. Plakas, S. Abdelkafy, E. Koudoumas, A- ElMoll, M. Pazos, N. Fourati, M. Smol, D. Hammiche, G. Lofrano, T. Szumiata, M. Narasimha, V. Prasad, **S. Rodríguez-Couto**, N. Kabay, R. Luque, O. Adiquzel, S. Tounsi and R. Kumar (2022). Editorial CIMEE22 Conference I Advanced Green Chemistry and Sustainable Technology for Environmental Enhancement. 4th International Symposium on Materials, Electrochemistry & Environment, Lebanese University, Lebanon.
- P. Sathishkumar, **S. Rodríguez-Couto**, T. Palanisami and S.K. Brar (2023). Mixed Contaminants: Occurrence, Interactions, Toxicity, Detection and Degradation. *Environmental Pollution*, 316 (Pt 2): 120642, DOI: 10.1016/j.envpol.2022.120642.
- M.P. Shah and **S. Rodríguez-Couto** (2023). All About Wastewater Treatment Technologies and Application Options. *Clean – Soil, Air, Water*, 51: 230030, DOI: 10.1002/clen.202300030.

Plenary and invited lectures – international

- S. Rodríguez-Couto.** Biodegradation with white-rot fungi and their enzymes.
2nd International Workshop on “Advances in Science and Technology of Natural Resources”. Invited speaker. Universidad de La Frontera, Pucón, Chile, 27-29 October 2010.
- S. Rodríguez-Couto.** Fungal laccases as green biocatalysts.
Global Ecological Security Symposium. Invited speaker. Ankara University, Ankara, Turkey, 15-18 October 2019.
- S. Rodríguez-Couto.** Green enzymes for wastewater treatment.
2nd International Virtual Conference of Biotechnology Research Centre (IVCBRC-2021). Keynote speaker (invited). Biotechnology Research Centre-Al-Nahrain University (in cooperation with The Egyptian Botanical Society), Baghdad, Iraq, 3-4 August 2021.
- S. Rodríguez-Couto.** Fungal laccases for environmental applications.
4th International Symposium on Materials, Electrochemistry & Environment (CIMEE 2022). Theme: Advanced Green Chemistry and Sustainable Technology for Environmental Enhancement. Plenary speaker (invited). Lebanese University, Beirut, Lebanon, 22-24 September 2022.

Conferences

Oral communications

S. Rodríguez, R. Santoro, C. Cameselle, A. Sanromán. Comparación de dos tipos de soportes inertes en la producción de MnP por *Phanerochaete chrysosporium* durante cultivos en estado semi sólido.

XI Galician-Portuguese Meeting on Chemistry. Ferrol, 26-28 November, 1997

R. Santoro, **S. Rodríguez**, C. Cameselle, A. Sanromán. Influencia de la composición del medio de cultivo con lactosuero en la producción de ácido oxálico con *Aspergillus niger*.

XI Galician-Portuguese Meeting on Chemistry. Ferrol, 26-28 November, 1997

D.R. Cabaleiro, **S. Rodríguez Couto**, M.A. Longo, A. Sanromán. Estabilidad de enzimas ligninolíticos durante el cultivo en estado sólido de *Phanerochaete chrysosporium*.

4th Iberian Congress on Biotechnology. Guimaraes, 13-15 July, 1998

J.R. Santoro, **S. Rodríguez Couto**, C. Cameselle, A. Sanromán. Producción de ácido oxálico con *Aspergillus niger* en fermentador de tanque agitado y air-lift.

4th Iberian Congress on Biotechnology. Guimaraes, 13-15 July, 1998

S. Rodríguez Couto. Producción de enzimas ligninolíticos en cultivos en estado semi-sólido.

V Meeting of the Spanish Thematic Network “Biodegradation of lignin and hemicelluloses. Biotechnology applied to paper industry”. Politechnical University of Catalunya. Barcelona and Terrassa, 1-2 October, 1998

M.A. Longo, **S. Rodríguez Couto**, M.A. Sanromán. Aprovechamiento de residuos agroindustriales para la producción de enzimas ligninolíticos y aplicación de éstos en forma inmovilizada

VII Meeting of the Spanish Thematic Network “Biodegradation of lignin and hemicelluloses. Biotechnology applied to paper industry”. Granada, 4-5 October, 2001

S. Rodríguez Couto, A. Sanromán. Producción de enzimas ligninolíticos por *Phanerochaete chrysosporium* en cultivos en estado semi sólido de paja de trigo.

XII Galician-Portuguese Meeting on Chemistry. Oporto, 11-13 November, 1998

S. Rodríguez Couto, I. Rivela, M. R. Muñoz, A. Sanromán. Decoloración de Poly R-478 por *Phanerochaete chrysosporium* en cultivos en estado semi-sólido de paja de cebada.

XIII Galician-Portuguese Meeting on Chemistry. Vigo, 17-19 November, 1999

I. Rivela, M.R. Muñoz, **S. Rodríguez Couto**, A. Sanromán. Producción de lignina peroxidasa y lacasa por *Phanerochaete chrysosporium* en un biorreactor de lecho compacto.

XIII Galician-Portuguese Meeting on Chemistry. Vigo, 17-19 November, 1999

M.R. Muñoz, I. Rivela, **S. Rodríguez Couto**, A. Sanromán. Producción de manganeso peroxidasa por *Phanerochaete chrysosporium* en biorreactores en estado semi-sólido.

XIII Encontro Galego Portugués de Química. Vigo, 17-19 November, 1999

R. Rodríguez, P. Gallego, **S. Rodríguez Couto**, A. Sanromán. Producción de enzimas ligninolíticos por *Phanerochaete chrysosporium* en cultivos en estado semi-sólido de bagazo de uva.

XIV Galician-Portuguese Meeting on Chemistry. Braga, 22-24 November, 2000

A. Domínguez, I. Rivela, **S. Rodríguez Couto**, A. Sanromán. Producción de enzimas ligninolíticos por *Phanerochaete chrysosporium* en un biorreactor de tambor rotatorio.

XIV Galician-Portuguese Meeting on Chemistry. Braga, 22-24 November, 2000

I. Rivela, A. Domínguez, **S. Rodríguez Couto**, A. Sanromán. Producción de enzimas ligninolíticos por *Phanerochaete chrysosporium* en un nuevo biorreactor para cultivo en estado sólido

XIV Galician-Portuguese Meeting on Chemistry. Braga, 22-24 November, 2000

A. Domínguez, **S. Rodríguez Couto**, M.A. Longo, M.A. Sanromán. Aplicación de técnicas de inmovilización a la degradación de tintes

VIII Meeting of the Spanish Thematic Network “Biodegradation of lignin and hemicelluloses. Biotechnology applied to paper industry”. Vigo, 13-14 November, 2003

A. Domínguez, **S. Rodríguez Couto**, A. Sanromán. Producción de enzimas ligninolíticos por *Phanerochaete chrysosporium* en matraces agitados

XV Galician-Portuguese Meeting on Chemistry. A Coruña, 21-23 November, 2001

A. Liébanas, **S. Rodríguez Couto**, A. Sanromán. Diseño de biorreactores para el desarrollo de fermentaciones en estado sólido

XV Encontro Galego Portugués de Química. A Coruña, 21-23 November, 2001

G. Rancaño, M. Lorenzo, **S. Rodríguez Couto**, A. Sanromán. Obtención de lacasa producida por *Trametes versicolor* en un biorreactor airlift

National Congress on Biotechnology. Sevilla, 2-5 July, 2002

L. Jiménez, I. Katakis, A. Fabregat, T. Schafer, **S. Rodriguez**, J.M. Mateo, M. Giamberini, B. Rivera, P. Argüeso, E. Calero, L. Vico, F. Hernandez, R. Genc, M. Medir, J.R. Alabart and G. Guillén-Gosálbez. CAPE tools in biotechnology: why, when, what, who, which ones and where?”

18th European Symposium on Computer Aided Process Engineering. Lyon (France), 1-4 June 2008

M. Najafi, **S. Rodríguez Couto**, M.G. Ghosikali, A.R. Yari and B. Hebati. Equilibrium and kinetics studies of Ethidium Bromide (EtBr) adsorption on natural Pumice (NP) and Aluminum coated Pumice (ACP).

6th International Conference on Chemical, Biological and Environmental Engineering (ICBEE 2014). Paris (France), 15-16 September 2014

F. Lassouane, H. Aït-Amar, S. Amrani and S. Rodríguez Couto. Green-catalyzed removal of phenolic compounds from aqueous solutions.

Final TreatRec (European Industrial Doctorate) Conference. Interdisciplinary concepts for municipal wastewater treatment and resource recovery. Tackling future challenges. Catalan Institute of Water Research (ICRA), Girona (Spain), 13-14 June 2018

Posters

S. Rodríguez, J. Pallarés, A. Sanromán y J.M. Lema. Efecto de la concentración de nitrógeno y de las condiciones operacionales en la producción de ácido cítrico.

3rd Iberian Congress on Biotechnology. Valladolid, 10-13 September, 1996

J. Pallarés, **S. Rodríguez**, A. Sanromán, G. Feijoo y J.M. Lema. Producción de enzimas ligninolíticas mediante fermentación en estado sólido.

3rd Iberian Congress on Biotechnology. Valladolid, 10-13 September, 1996

S. Rodríguez Couto, M.A. Longo, C. Cameselle and A. Sanromán. Influence of some inducers on activity of ligninolytic enzymes from corncob cultures of *Phanerochaete chrysosporium* in semi-solid-state conditions.

Stability and Stabilization of Biocatalysts. Córdoba, 19-22 April, 1998

S. Rodríguez Couto, M.A. Longo, C. Cameselle and A. Sanromán. Ligninolytic enzymes from corncob and barley straw cultures of *Phanerochaete chrysosporium* in semi-solid-state conditions.

4th Iberian Congress on Biotechnology. Guimaraes, 13-15 July, 1998

D. Moldes, **S. Rodríguez Couto, C. Cameselle y A. Sanromán.** Decoloración de Poly R-478 por *Phanerochaete chrysosporium* en cultivos discontinuos.

4th Iberian Congress on Biotechnology. Guimaraes, 13-15 July, 1998

D.R. Cabaleiro, **S. Rodríguez**, A. Sanromán y M.A. Longo. Estudio de la producción de proteasas por hongos ligninolíticos durante cultivos en estado sólido.

XII Galician-Portuguese Meeting on Chemistry. Oporto, 11-13 November, 1998

M. Sobrino, **S. Rodríguez Couto, C. Cameselle y A. Sanromán.** Depuración aerobia de efluentes de industrias conserveras.

5th ANQUE International Congress of Chemistry. Puerto de la Cruz. Tenerife, 9-11 December, 1998

S. Rodríguez Couto, I. Rivela, M.R. Muñoz, M.I. Peña and A. Sanromán. Decolourisation of the Polymeric dye Poly R-478 by *Phanerochaete chrysosporium* grown on nylon support under different culture conditions.

8th Mediterranean Congress of Chemical Engineering. Barcelona, 10-12 November, 1999

M.R. Muñoz, I. Rivela, **S. Rodríguez Couto** and A. Sanromán. Production of MnP by *Phanerochaete chrysosporium* cultivated in static flasks and in a tubular bioreactor.

8th Mediterranean Congress of Chemical Engineering. Barcelona, 10-12 November, 1999

I. Rivela, J. Iglesias, M.R. Muñoz, **S. Rodríguez Couto** and A. Sanromán. Manganese-dependent peroxidase from wood chips cultures of *Phanerochaete chrysosporium* under semi-solid-state conditions.

8th Mediterranean Congress of Chemical Engineering. Barcelona, 10-12 November, 1999

D.R. Cabaleiro, **S. Rodríguez**, A. Sanromán and M.A. Longo. Effect of pH on the deactivation kinetics of *Phanerochaete chrysosporium* manganese-dependent peroxidases.

8th Mediterranean Congress of Chemical Engineering. Barcelona, 10-12 November, 1999

S. Rodríguez Couto, D. Moldes, C. Cameselle and A. Sanromán. *In vitro* decolourisation of Poly R-478 by MnP of *Phanerochaete chrysosporium* grown in a packed-bed bioreactor.

Symposium on Biotechnology in the Textile Industry. Póvoa de Varzim, 3-7 May, 2000

S. Rodríguez Couto, G. Feijoo, M.T. Moreira y J.M. Lema. Análisis de las condiciones ambientales para la producción de lignina peroxidasa en un biorreactor de lecho fijo.

XIV Galician-Portuguese Meeting on Chemistry. Braga, 22-24 November, 2000

M. Barreiro, **S. Rodríguez Couto**, A. Sanromán and M.A. Longo. Study of manganese peroxidases produced by *Phanerochaete chrysosporium* in a novel immersion solid state bioreactor

10th European Congress on Biotechnology. Madrid, 8-11 July, 2001

M. Gundín, **S. Rodríguez Couto** y A. Sanromán. Producción de enzimas ligninolíticas por *Trametes versicolor* en cultivos en estado sólido

XV Galician-Portuguese Meeting on Chemistry. A Coruña, 21-23 November, 2001

G. Rancaño, M. Lorenzo, **S. Rodríguez Couto** y A. Sanromán. Condiciones óptimas de operación en las reacciones de degradación de lacasa

XV Galician-Portuguese Meeting on Chemistry. A Coruña, 21-23 November, 2001

M. Lorenzo, G. Rancaño, **S. Rodríguez Couto** y A. Sanromán. Efecto de diversos inductores en la producción de lacasa por *Trametes versicolor* en cultivos sumergidos

XV Galician-Portuguese Meeting on Chemistry. A Coruña, 21-23 November, 2001

A. Liébanas, **S. Rodríguez Couto** y A. Sanromán. Estudio de la concentración de amonio y de la adición de pieles de naranja en la producción de lacasa por *Trametes hirsuta*

National Congress on Biotechnology. Sevilla, 2-5 July, 2002

E. Rosales, **S. Rodríguez Couto** y A. Sanromán Utilización de residuos alimentarios para la producción de lacasa por *Trametes hirsuta* en cultivos en estado sólido

National Congress on Biotechnology. Sevilla, 2-5 July, 2002

D. Hofer, **S. Rodríguez Couto** A. Sanromán y G. Gübitz. Desarrollo de una técnica de inmovilización para la producción de lacasa por *Trametes hirsuta*

National Congress on Biotechnology. Sevilla, 2-5 July, 2002

- E. Otero, I. Ramos, **S. Rodríguez Couto** y A. Sanromán. Efecto del pH en la producción de goma de xantano
National Congress on Biotechnology. Sevilla, 2-5 July, 2002
- I. Ramos, E. Otero, **S. Rodríguez Couto** y A. Sanromán. Producción de polisacáridos extracelulares por *Arthobacter viscosus*
National Congress on Biotechnology. Sevilla, 2-5 July, 2002
- N. Molares, D. Moldes, **S. Rodríguez Couto** y A. Sanromán. Propiedades catalíticas de lacasa producida por *Trametes versicolor*
National Congress on Biotechnology. Sevilla, 2-5 July, 2002
- M. Lorenzo, **S. Rodríguez Couto** y A. Sanromán. Efecto del alcohol veratrílico en la producción de lacasa en cultivos sumergidos de *Trametes versicolor*
National Congress on Biotechnology. Sevilla, 2-5 July, 2002
- E. Rosales, **S. Rodríguez Couto**, M.A. Sanromán, D. Hofer and G. Gübitz. Development of bioreactors for laccase production by *Trametes hirsuta*
9th Mediterranean Congress of Chemical Engineering. Barcelona, 26-29 November, 2002
- E. Rosales, **S. Rodríguez Couto** and M.A. Sanromán. Kiwi fruit: a novel support-substrate for laccase production by *Trametes hirsute* under solid-state fermentation
9th Mediterranean Congress of Chemical Engineering. Barcelona, 26-29 November, 2002
- E. Otero, I. Ramos, E. Rosales, **S. Rodríguez Couto** and M.A. Sanromán. Effect of operational conditions on heteropolysaccharide production by *Arthrobacter viscosus* in a stirred tank reactor
9th Mediterranean Congress of Chemical Engineering. Barcelona, 26-29 November, 2002
- M. Lorenzo, **S. Rodríguez Couto** and M.A. Sanromán. Determination of optimum medium composition for laccase production under solid-state conditions
9th Mediterranean Congress of Chemical Engineering. Barcelona, 26-29 November, 2002
- D. Moldes, M. Lorenzo, **S. Rodríguez Couto** and M.A. Sanromán. Characterisation of enzymatic crude from lignocellulosic residue-supplemented cultures of *Trametes versicolor*
9th Mediterranean Congress of Chemical Engineering. Barcelona, 26-29 November, 2002
- A. Domínguez, M. Lorenzo, **S. Rodríguez Couto** and M.A. Sanromán. Immobilization of *Trametes hirsuta* in alginate beads. Operation in an airlift reactor
9th Mediterranean Congress of Chemical Engineering. Barcelona, 26-29 November, 2002
- E. Rosales, D. Moldes, **S. Rodríguez Couto** and M.A. Sanromán. Laccase production by *Trametes hirsuta* under solid-state fermentation using orange peelings as a substrate
4th European Congress of Chemical Engineering. Granada, 21-25 September, 2003
- S. Rodríguez Couto**, E. Rosales and M.A. Sanromán. Decoloración de tintes por *Trametes hirsuta* operando en reactores de lecho expandido
National Congress on Biotechnology. Oviedo, 19-23 July, 2004

- S. Rodríguez Couto**, A. Rodríguez, R.R.M. Paterson, N. Lima and J.A. Teixeira. Fed-batch operation increased laccase activity by *Trametes hirsuta* at reactor scale
12th European Congress on Biotechnology. Copenhagen, 21-24 August, 2005
- J.F. Osma, **S. Rodríguez Couto**, R. Garcia and J.L. Toca Herrera. Polyelectrolyte recover for preventing release in nano-capsules with perfume content
3rd NanoSpain Workshop. Pamplona, 20-23 March, 2006
- J.F. Osma, J.L. Toca Herrera and **S. Rodríguez Couto**. Effect of different carbon sources on laccase production by *Trametes pubescens* grown on stainless steel sponge
International Symposium on Environmental Biocatalysis. Córdoba, 23-26 April, 2006
- J.F. Osma, J.L. Toca Herrera and **S. Rodríguez Couto**. Comparison of synthetic dye discoloration obtained using laccases from different sources
International & European Symposium on Environmental Biotechnology. Leipzig, 9-13 July, 2006
- J.F. Osma, J.L. Toca Herrera and **S. Rodríguez Couto**. Laccase production by *Trametes pubescens* grown on wheat bran under solid-state conditions
6th European Symposium on Biochemical Engineering Science, Salzburg, 27-30 August, 2006
- J.F. Osma, J.L. Toca Herrera and **S. Rodríguez Couto**. Agricultural wastes as adsorbents for azo dyes
XXXI Iberian Adsorption Meeting. Tarragona, 27-29 September, 2006
- J.F. Osma, J.L. Toca Herrera and **S. Rodríguez Couto**. Adsorption of a diazo dye using mandarin peels
6th ANQUE International Congress of Chemistry. Puerto de la Cruz (Tenerife), 5-7 December, 2006
- J.F. Osma, M. Delcea, J.L. Toca Herrera and **S. Rodríguez Couto**. Laccase production by *Trametes hirsuta* grown on paper cuttings
6th ANQUE International Congress of Chemistry. Puerto de la Cruz (Tenerife), 5-7 December, 2006
- J.F. Osma, J.L. Toca Herrera, G.M. Gübitz and **S. Rodríguez Couto**. Enzymatic immobilization on alumina pellets improved the decoloration of synthetic dyes
4th NanoSpain Workshop. Sevilla, 12-15 March, 2007
- J.F. Osma, **S. Rodríguez Couto** and J.L. Toca Herrera. Effect of different organic nitrogen sources on laccase production by *Trametes pubescens*
13th European Congress on Biotechnology. Barcelona, 16-19 September, 2007
- J.F. Osma, **S. Rodríguez Couto** and J.L. Toca Herrera. Poly-R-478 and ABTS oxidation by the white-rot fungus *Trametes pubescens* on agar plates. *Journal of Biotechnology*
13th European Congress on Biotechnology. Barcelona, 16-19 September, 2007
- J.F. Osma, J.L. Toca Herrera, R. Garcia and **S. Rodríguez Couto**. Volumetric mass analysis in nano-capsules releasing perfume content
Nanobioeurope 2008. Barcelona, 9-13 June 2008
- S. Rodríguez-Couto**, J.F. Osma and J.L. Toca Herrera. Effective-cost production of laccase: reutilisation of a natural adsorbent.
4th European Meeting on Oxizymes. Helsinki (Finland), 16-18 June 2008

J.F. Osma, J.L. Toca Herrera and **S. Rodríguez Couto**. Reuse of a natural dye adsorbent for laccase production

11th Mediterranean Congress of Chemical Engineering. Barcelona, 21-24 October 2008

J.F. Osma, J.L. Toca Herrera and **S. Rodríguez-Couto**. Laccase production under solid-state fermentation conditions: from flask to bioreactor scale

11th Mediterranean Congress of Chemical Engineering. Barcelona, 21-24 October 2008

K. Enayatzamir, H.A. Alikhani, F. Tabandeh, B. Yakhchali, L. Mohammadi and **S. Rodríguez-Couto**. Combined action of laccase and cellobiose dehydrogenase for the decolouration of the azo dye Ponceau Xylidine R.

14th European Congress on Biotechnology. Barcelona, 16-18 September, 2009

K. Enayatzamir, F. Tabandeh, B. Yakhchali and **S. Rodríguez-Couto**. Decolouration of the diazo dye Reactive Black 5 by *Trametes pubescens* at laboratory reactor scale.

1st International Conference on Advances on Wastewater Treatment and Reuse. Tehran (Iran), 10-12 November, 2009

K. Enayatzamir, B. Yakhchali, F. Tabandeh, H.A. Alikhani, L. Mohammadi and **S. Rodríguez-Couto**. Biodegradation of the diazo dye Reactive Black 5 by *Phanerochaete chrysosporium* immobilised in fixed-bed bioreactors.

5th European Meeting on Oxizymes. Leipzig (Germany), 14-16 June 2010

K. Enayatzamir, F. Tabandeh, B. Yakhchali and **S. Rodríguez-Couto**. *In vitro* decolouration and kinetic studies by crude MnP from *P. chrysosporium*.

5th European Meeting on Oxizymes. Leipzig (Germany), 14-16 June 2010

S. Contreras, M.S. Yalfani y **S. Rodríguez-Couto**. Eliminación de ácido clofíbrico mediante la combinación de Procesos de Oxidación Avanzada y la degradación por hongos

X Meeting of the Spanish Water Treatment Network (META). Almería (Spain), 4-6 October 2012

L. Gioia, P. Menéndez, C. Manta, K. Ovsejevi, J. Burgueño y **S. Rodríguez-Couto**. Optimización del cultivo de *Pycnoporus sanguineus* en desechos forestales para la producción de lacasa y aplicación de esta enzima en la degradación de colorantes sintéticos.

XXI Latin American Congress on Microbiology (ALAM). Santos (Brazil), 28 October-1 November 2012

L. Badiefar, B. Yakhchali, M. Khodabandeh and **S. Rodríguez-Couto**. Environmental Microorganisms with High Potential for Bisphenol-A Degradation.

EMBO Conference on Microbiology after the genomics revolution: Genomes 2014. Paris (France), 24-27 June 2014

V. Kaberdin, B.I. Montánchez, E. Sevillano, A. Kaberdina, **S. Rodríguez-Couto** and L. Gallego. Selection of soil microorganisms able to grow on minimal medium containing pentachlorobenzene as a sole carbon source.

15th International Symposium on Microbial Ecology (ISME 15). Seoul (Korea), 24-29 August 2014

R. Tomovska, N. Ormategi and **S. Rodríguez-Couto**. Hybrid biocatalytic system based on enzyme laccase immobilized onto 3D graphene/polymer porous hydrogels.

European Polymer Federation Congress. Dresden (Germany), 21-26 June 2015

S. Rodríguez-Couto. Lignin degradation by the white-rot fungus *Trametes pubescens*.

The International Symposium on Green Chemistry (ISGC2017). La Rochelle (France), 16-19 May 2017

Books and book chapters

S. Rodríguez Couto, M.A. Longo, C. Cameselle and A. Sanromán. (1998). Influence of some inducers on activity of ligninolytic enzymes from corn cob cultures of *Phanerochaete chrysosporium* in semi-solid-state conditions. In: "*Stability and Stabilization of Biocatalysts*". Ballesteros, A., Plou, F.J., Iborra, J.L. and Halling, P. (Eds.), Elsevier, Amsterdam. ISBN 0-444-82970-9. Vol. 15, pp. 703-708.

J.L. Toca Herrera, J.F. Osma and **S. Rodríguez-Couto** (2007). Potential of solid-state fermentation for laccase production (invitation). "*Communicating Current Research and Educational Topics and Trends in Applied Microbiology*". Méndez Vilas, A. (Ed.), Formatex Publishers, Spain. ISBN 978-84-611-9422-3. Vol. 1, pp. 391-400.

S. Rodríguez-Couto and J.L. Toca Herrera (2009). Pesticide degradation by laccases (invitation). "*Progress in Pesticide Research*". Kanzantakis, C.M. (Ed.). Nova Science Publishers, Hauppauge, NY. ISBN 978-1-60456-201-9, pp. 461-475.

J.F. Osma, **S. Rodríguez-Couto** and J.L. Toca Herrera (2010). Laccases and their potential application to synthetic dye treatment (invitation). LAP Lambert Academic Publishing GmbH & Co, Germany. ISBN 978-3-8383-4525-3.

S. Rodríguez-Couto and J.L. Toca Herrera (2012). Applications of Laccases (invitation). "*Advances in Environmental Research*". Daniels, J.A. (Ed.). Nova Science Publishers Inc., Hauppauge, NY. ISBN 978-1-61470-743-1, Vol. 22. pp. 219-232.

M.S. Roriz and **S. Rodríguez-Couto** (2012). White-rot fungi as promising bioremediation agents (invitation). "*Fungi: Types, Environmental Impact and Role in Disease*". Arias Vázquez, M.S., Paz Silva, A. (Eds.). Nova Science Publishers Inc., Hauppauge, NY. ISBN 978-1-61942-671-9, pp. 477-508.

S. Contreras, M.S. Yalfani and **S. Rodríguez-Couto** (2012). *Eliminación de ácido clofibríco mediante la combinación de procesos de oxidación avanzada y la degradación por hongos*. Proceedings of the X Meeting of the Spanish Water Treatment Network. University of Almeria Publishing. ISBN 978-84-15487-33-3, pp. 215-220.

S. Rodríguez-Couto (2014). Laccases: green biocatalysts for greener applications (invitation). "*Industrial Biocatalysts*". Gründwald, P. (Ed.). Pan Stanford Publishing Pte. Ltd., Singapore, ISBN: 978-981-4463-88-1, pp. 691-715.

- S. Rodríguez-Couto** (2014). Fungal laccases: a promising eco-friendly approach for the removal of pharmaceutical compounds (invitation). *“Microbes in Process”*. Garg, N., Aeron, A. (Eds.). Nova Science Publishers Inc., Hauppauge, NY. ISBN: 978-1-63117-127-7, pp. 163-193.
- S. Rodríguez-Couto** (2014). Degradation of azo dyes by white-rot fungi (invitation). *“Microbial Degradation of Synthetic Dyes in Wastewaters”*. Singh, S.N. (Ed.). Springer International Publishing Switzerland, ISBN: 978-3-319-10941-1, pp. 315-331.
- S. Rodríguez-Couto** (2015). Fungal laccase in the textile industry (invitation). *“Fungal Biomolecules: Sources, Applications and Recent Developments”*. Gupta, V.K., Sreenivasaprasad, S., Mach, R.L. (Eds.). Wiley-Blackwell, Germany. ISBN: 978-1-118-95829-2, pp. 63-72.
- S. Rodríguez-Couto** and M. Miransari (2015). “Soil Bioremediation by the Fungi, *Trametes* Genus” (invitation). CreateSpace Independent Publishing Platform, Amazon group. ISBN-10: 1514264838, ISBN-13: 9781514264836.
- S. Rodríguez-Couto** (2016). Potential of white-rot fungi to treat xenobiotic-containing wastewater (invitation). *“Fungal Applications in Sustainable Environmental Biotechnology”*. Purchase, D. (Ed.). Springer Nature, Springer International Publishing AG, Switzerland. ISBN 978-3-319-42850-5, pp. 91-113.
- S. Rodríguez-Couto** (2016) Microbial laccases as potential eco-friendly biocatalysts for the food processing industries (invitation). *“Microbial Enzyme Technology in Food Applications”*. Ramesh, C.R., Rosell, C.M. (Eds.). CRC-Science (Taylor&Francis Group), USA. ISBN 978-1-498-74983-1, pp. 257-270.
- S. Rodríguez-Couto** (2018). Solid-state fermentation for laccases production and their applications (invitation). *“Current Developments in Biotechnology and Bioengineering: Current Advances in Solid-State Fermentation”*. Pandey, A., Larroche, C., Soccol, C. (Eds.). Elsevier B.V. ISBN: 978-0444639905, pp. 211-227.
- S. Rodríguez-Couto** (2018). Green Nanotechnology for Biofuel Production (invitation). *“Sustainable Approaches for Biofuels Production Technologies: From Current Status to Practical Implementation”*. Biofuel and Biorefinery Technologies Series. Srivastava, N., Srivastava, M., Mishra, P.K., Upadhyay, S.N., Ramteke, P.W., Gupta, V.K. (Eds.). Springer Nature, Springer International Publishing AG, Switzerland. ISBN: 3319947966, pp. 73-82.
- S. Rodríguez-Couto** (2019). Current Trend in the Production of Ligninolytic Enzymes (invitation). *“A Handbook on High Value Fermentation Products, Volume 2: Human Welfare”*. Saran, S., Babu, V., Chaubey, A. (Eds.). Wiley, Scrivener Publishing LLC., Beverly, MA, USA. ISBN-10: 1119554837, ISBN-13: 978-1119554837, pp. 81-106.
- S. Rodríguez-Couto** (2019). Fungal Laccase: A Versatile Enzyme for Biotechnological Applications (invitation). *“Recent Advancement in White Biotechnology through Fungi - Volume 1: Diversity and Enzymes Perspectives”*. Fungal Biology Series. Yadav, A.N., Mishra, S., Singh, S., Gupta, R. (Eds.). Springer Nature, Springer International Publishing AG, Switzerland. ISBN: 978-3-030-10479-5, pp. 429-458.

- S. Rodríguez-Couto** (2020). Research and Production of Ingredients Using Unconventional Raw Materials as Alternative Substrates (invitation). “*Bioprocessing for Biomolecules Production*”. Molina, G., Gupta, V.K., Singh, B.N., Gathergood N. (Eds.), Wiley-Blackwell, Germany. ISBN: 978-1-119-43432-0, pp. 255-272.
- K. Saravanakumar, S. Shanmugam, A. Hari, Z. Usmani, D.M.Ali, K. Kathiresan, Y. Karpichev, B.P. Singh, **S. Rodríguez-Couto**, M.-H. Wang and V.K. Gupta (2020). Strategies of Biotechnological Innovations Using *Trichoderma*. “*Trichoderma: Agricultural Applications and Beyond*”. Soil Biology, vol. 61. C. Manoharachary, H.B. Singh, A. Varma (Eds.). Springer Nature, Springer International Publishing AG, Switzerland. ISBN: 978-3-030-54757-8, pp. 325-350.
- S. Rodríguez-Couto** (2021). Biophotodegradation of Pollutants from Wastewater (invitation). “*Bioremediation for Environmental Sustainability: Approaches to Tackle Pollution for Cleaner and Greener Society*”. Kumar Rudra, V., Saxena, G., Shah, M.P. (Eds.), Elsevier B.V., ISBN: 978-0-12-820318-7, pp. 269-281.
- J.K. Biswas, A. Kumar, S. Biswas, M.P. Shah and **S. Rodríguez-Couto** (2021). Win-win wastewater phycoremediation: coupled carbon sequestration and heavy metal removal. “*An Integration of Phycoremediation Processes in Wastewater Treatment*”. Shah, M.P., Rodriguez-Couto, S., Vargas de la Cruz, C.B., Biswas, J.K. (Eds.). Elsevier Inc., ISBN: 9780128234990, pp. 529-542.
- J.K. Biswas, A. Mitra, M.P. Shah and **S. Rodríguez-Couto** (2021). Nanoadsorbents for scavenging emerging contaminants from wastewater. “*Development in Wastewater Treatment Research and Processes: Removal of Emerging Contaminants from Wastewater through Bionanotechnology*”. Rodriguez-Couto, S., Shah, M.P., Biswas, J.K. (Eds.). Elsevier Inc., ISBN: 9780323855839, pp. 1-15.
- S. Rodríguez-Couto** (2022). Algal Biorefinery: Techno-economic Analysis (invitation). “*Handbook of Biofuels*”. Sanjay S. (Ed.), Academic Press Inc., ISBN: 9780128228104, pp. 115-124.
- S. Rodríguez-Couto** (2023). Biotransformation of bisphenol A by laccase enzymes. “*Emerging Technologies in Applied and Environmental Microbiology*”: *Developments in Applied Microbiology and Biotechnology*. Shah, M.P., Vyas, B.R.M. (Eds.). Academic Press Inc., ISBN: 978-0-323-99895-6, pp. 111-125.
- L. Badiefar, **S. Rodríguez-Couto** and B. Riazalhosseini (2023). Genetic engineering of algae. “*Emerging Technologies in Applied and Environmental Microbiology*”: *Developments in Applied Microbiology and Biotechnology*. Shah, M.P., Vyas, B.R.M. (Eds.). Academic Press Inc., ISBN: 978-0-323-99895-6, pp. 149-179.

Financed projects

1996-1998

“Optimisation of ligninolytic enzyme production in solid state cultures” (XUGA 30113A9) financed by the *Xunta de Galicia* (local government of Spain), 34257.69 euros

1997-1998

“Development of bioreactors for ligninolytic enzyme production in solid state cultures” financed by the University of Vigo, Spain, 6010.12 euros.

1998-2000

“Development of bioreactors for solid state cultivation: application to ligninolytic enzyme production” (PB97-0668) financed by the General Direction for Higher Education and Scientific Research, Spain, 53550.18 euros.

1999-2000

“Development of bioreactors for solid state cultivation: application to ligninolytic enzyme production” financed by the *Xunta de Galicia* (local government of Spain) and the University of Vigo, Spain, 9616.19 euros.

“Biodegradation of xenobiotic compounds in effluents from dye manufacturing industries” financed by the University of Vigo, Spain, 6010.12 euros.

2001-2004

“Development of an electrokinetic project for the recovery of soil contaminated with heavy metals” (PGIDT01MAM30101PR) financed by the *Xunta de Galicia* (local government of Spain), 78011.37 euros.

“New sources of thermophilic lipases: production and purification from *Thermus spp*” (PPQ2001-3361) financed by the Spanish Ministry of Science and Technology, 61513.58 euros.

2004-2007

“Development of an integral treatment for the removal of organic pollutants in soils” (CTM2004-01539) financed by the Spanish Ministry of Science and Technology, 92000 euros.

2004-2008

“Continuous decolourization of effluents from the textile industry”, project associated to the *Ramón y Cajal* position (CTE/351/2004), financed by the Spanish Ministry of Education and Science, hiring funds: 160,000 euros; complementary funds: 12000 euros.

2005-2006

“Bioremediation of MTBE-polluted soils. Treatment with enzymatic biocatalysts and optimisation of their application” financed by the Spanish Ministry of Environment, 6517 euros.

2006-2007

“Degradation of textile effluents with laccase” (2005-ACCÉS-23) financed by Rovira i Virgili University, Tarragona, Spain, 2383.46 euros.

Integrated Actions Spain-Austria (HU2005-0030) financed by the Spanish Ministry of Education and Science, 11040 euros.

2007-2009

“A novel approach of hybrid materials (synthetic polyelectrolytes-proteins) for biotechnology applications at different scales (CTQ2007-66541) financed by the Spanish Ministry of Science and Technology, 96000 euros.

2009-2012

“Recovery of aqueous effluents from pharmaceutical industry by means of innovative combined catalytic technologies: advanced oxidation processes and biological treatment (CTM2008-02453/TECNO) financed by the Spanish Ministry of Science and Innovation, 90000 euros.

2012-2014

“Towards the identification of novel laccases for bioremediation of toxic phenolic compounds” financed by the Industry, Trade and Tourism Department of the Basque Government – SAIOTEK (S-PE12UN84), Basque Country, Spain, 28000 euros.

2013-2014

“Synthesis of novel graphene-based materials for microorganism immobilisation” financed by the Industry, Trade and Tourism Department of the Basque Government – SAIOTEK (S-PC13UN019), Basque Country, Spain, 20000 euros.

2015-2017

PLEURISTANT: “Design and implementation of a device for the *in situ* analysis of pleural liquid based on pH, glucose, LDH and total protein monitorization in the sample”. Bexen medical (Gipuzkoa) co-financed by means of the programmes HAZITEK, CDTI and RIS3 (IG-2015/00278), 275000 euros.

2016-2017

“Collaborative research on waste valorisation, magnetic frustration, electrospinning and nanofabrication” financed by the Industry, Trade and Tourism Department of the Basque Government – ELKARTEK Basque Country (NG2015), 203828 euros.

2019

“New technical solution to treat wastewater from green table olive processing” financed by Junta de Extremadura (local government of Spain) and FEDER. 80000 euros. *Declined.*

2021 **Investment funding** financed by LUT University, Finland, 100000 euros

2022-2023

“Identification and decrease of the polycyclic aromatic hydrocarbons (PAHs), contamination risks from fishing products by bilge wastewater” financed by The National Plan for Science, Technology and Innovation of the King Saud University, Saudi Arabia, 3000 euros

2022-2024

MUC Coordination Funding 2021 “Strengthening research activities related to water treatment” financed by Mikkeli University Consortium (MUC), Finland, 60000 euros

Doctoral thesis supervised

Johann Faccelo Osma Cruz. Production of laccases by the white-rot fungus *Trametes pubescens* for their potential application to synthetic dye treatment. Department of Chemical Engineering. Rovira i Virgili University (Tarragona, Spain), 30th October 2009

Grade: *Magna cum laude and extraordinary prize of doctorate*

Verónica Saravia. Bio-compatible interfaces. Department of Chemical Engineering. Rovira i Virgili University (Tarragona, Spain), 9th July 2008

Grade: *Magna cum laude*

Master thesis supervised

Ana Margarida da Silva Roriz. Optimisation of Reactive Black 5 decolouration by laccase. Department of Chemical Engineering. Rovira i Virgili University (Tarragona, Spain) and Department of Biological Engineering. University of Minho (Braga, Portugal), November 2008

Isabel María do Barro Fernandes Machado. Neomycin production by *Streptomyces sp* in solid-state fermentation. Department of Chemical Engineering. Rovira i Virgili University (Tarragona, Spain) and Department of Biological Engineering. University of Minho (Braga, Portugal), November 2008

Johann Faccelo Osma Cruz. Banana skin: a novel material for a low-cost production of laccase. Department of Chemical Engineering. Rovira i Virgili University (Tarragona, Spain), 3rd July 2007

María Gundín Garcés. Aprovechamiento de residuos agroindustriales. *Producción de lacasa mediante Trametes sp*. Department of Chemical Engineering. University of Vigo (Vigo, Spain), 28th May 2004

Emilio Rosales Villanueva. *Producción del enzima lacasa en cultivos en estado sólido por Trametes hirsuta*. Department of Chemical Engineering. University of Vigo (Vigo, Spain), 17th July 2003

Doris Hofer. Immobilization of *Trametes hirsuta* for laccase production. Department of Chemical Engineering, University of Vigo (Vigo, Spain) and Institute for Environmental Biotechnology, Graz University of Technology (Graz, Austria), 27th November 2002

Other graduate student supervision

- March 2017-February 2018. MSc. Elham Soleimani (Ph.D. student from Sari Agricultural Sciences and Natural Resources University (SANRU) in Sari, Iran). Research stage as a part of her doctoral thesis on the topic “Biodegradation of tetracycline and its other derivatives with recombinant laccase and enzyme immobilization”. Research stage financed by the Ministry of Science, Research and Technology of the Islamic Republic of Iran.
- October 2016-August 2017. MSc. Fatiha Lassouane (researcher at the Renewable Energy Development Centre of Algiers (CDER) and PhD student at the University of Sciences & Technology H. Boumediene (USTHB) in Algiers, Algeria). Research stage as a part of her doctoral thesis entitled “*Biodégradation des composés naturels ou sous-produits/rejets industriels riches en Phénols: Aspects biotechnologiques*” financed by the *Ministère de l’Enseignement Supérieur et de la Recherche Scientifique* (Algeria).
- January-December, 2016. Supervision of MSc. Leire Barandiaran Larrea on the topic “Lignocellulosic degradation by laccase enzymes” in the framework of an ELKARTEK (Basque Country, local government of Spain) project.
- November 2015. MSc. Fatiha Lassouane (researcher at the Renewable Energy Development Centre of Algiers (CDER) and PhD student at the University of Sciences & Technology H. Boumediene (USTHB) in Algiers, Algeria). Decolouration of phenolic dyes by immobilised biocatalysts. Research stage financed by CDER (Algeria).
- January-July, 2014. MSc. Leila Badiefar (Ph.D. student from National Institute of Genetic Engineering and Biotechnology (NIGEB) in Tehran, Iran). Research stage as a part of her doctoral thesis on the topic “Degradation pathway of bisphenol A by bacterial strains isolated from petrochemical wastewater”. Research stage financed by NIGEB (Iran).
- May-June, 2014. MSc. Bouthaina Ghariani (Ph.D. student from University of Sfax, Tunisia). Biodegradation of antibiotics by immobilised fungi and their enzymes. Research stage financed by the Tunisian Ministry for Higher Education and Scientific Research.
- May-June, 2014. MSc. Mohamed Harir (Ph.D. student from the University of M’Sila, Algeria). Production of actives bio-molecules by actinomycetes bacteria isolated from Sahara soils. Research stage financed by University of M’Sila, Algeria.
- November-December, 2013. MSc. Ahmed Bedoui (Ph.D. student from the Higher Biotechnology Institute of Monastir, Tunisia). Impact of wastewater on plant growth. Research stage financed by the Unit of Bioactive and Natural Substances and Biotechnology, Faculty of Pharmacy of Monastir, Tunisia.
- May-June, 2012. MSc. Dalel Daassi (Ph.D. student from University of Sfax, Tunisia). Immobilisation of laccase enzyme for its subsequent application to the decolouration of synthetic dyes. Research stage financed by the Tunisian Ministry for Higher Education and Scientific Research.

November 2011-January 2012. Larissa Gioia Fabre (Ph.D. student from *Universidad de la República*, Uruguay). Laccase production by basidiomycetes isolated from *Eucaliptus* in Uruguay: a contribution to environment protection. Research stage financed by *Fundación Carolina* (Spain).

January-November, 2008. MSc. Naeimeh Enayatzamir (Ph.D. student from University of Tehran, Iran). Enzymatic and microbial degradation of azo dyes. Research stage financed by the University of Tehran (Iran).

Trainee supervision

January-June, 2016. David López Ibáñez (undergraduate student from the School of Engineering (TECNUN), University of Navarra, Donostia-San Sebastian, Spain). Searching for an efficient immobilisation method for laccase enzymes.

October-December, 2013. Julia Baranova (undergraduate student from the Polytechnic School, UPV/EHU, Donostia-San Sebastian, Spain). Biological treatment of xenobiotics.

October-December, 2013. Aitor Beldarrain Carrión (undergraduate student from the Polytechnic School, UPV/EHU, Donostia-San Sebastian, Spain). Development of a technique for enzyme immobilisation.

Final-grade project supervised

January-September 2016. Supervision of the Final-Grade Project of David López Ibáñez (undergraduate student from the School of Engineering (TECNUN), University of Navarra, Donostia-San Sebastian, Spain). Searching for an efficient immobilisation method for laccase enzymes.

Courses attended

9-10 March 2023 **Online Expert Training Sessions for the Evaluation of Mobility Applications in the fields of School Education, Adult Education and Vocational Education and Training Education (KA122), Erasmus Accreditation for Higher Education Mobility Consortia (KA130) and Mobility Projects for Higher Education Students and Staff Supported by External Policy Funds (KA171-HED), Erasmus+ 2023 Call.** Spanish Ministry of Universities, National Agency SEPIE, Spain.

31 October-14 December 2022 **Pre-Intermediate Finnish for the Staff.** LAB University of Applied Sciences, LUT University, Finland.

- 7-8 November 2022 **Online Expert Training Sessions for the Erasmus Accreditation Applications (KA120) in School Education, Adult Education and Vocational Education Erasmus+ 2022 Call.** Spanish Ministry of Universities, National Agency SEPIE, Spain.
- 5 September-19 October 2022 **Elemental Finnish for the Staff.** LAB University of Applied Sciences, LUT University, Finland.
- 7 April 2022 **Workshop FELACC 2022.** “De cara a la Gestión de Colecciones de Cultivos Microbianos”. Centro Multidisciplinario de Investigaciones Tecnológicas (CEMIT), Paraguay.
- 22-23 March 2022 **First Aid Course.** Mikkeli University Consortium (MUC), Mikkeli, Finland.
- 17-18 March 2022 **Online Expert Training Sessions for the Evaluation of Mobility Applications in the fields of School Education, Adult Education and Vocational Education and Training Education (KA122), Erasmus Accreditation for Higher Education Mobility Consortia (KA130) and Mobility Projects for Higher Education Students and Staff Supported by External Policy Funds (KA171-HED), Erasmus+ 2022 Call.** Spanish Ministry of Universities, National Agency SEPIE, Spain.
- 11 January-24 February 2022 **Elemental Finnish for the Staff.** LAB University of Applied Sciences, LUT University, Finland.
- 1 September-14 December 2021 **Survival Finnish for the Staff.** LAB University of Applied Sciences, LUT University, Finland.
- 3-4 November 2021 **Online Training Sessions for the Evaluation of Applications for Erasmus Accreditation (KA120) in the fields of School Education, Adult Education and Vocational Education and Training, Erasmus+ 2021 Call.** Spanish Ministry of Universities, National Agency SEPIE, Spain.
- 31 May-2 June 2021 **Online Training Sessions for the Evaluation of Applications KA130-HED-Erasmus+ 2021 Call.** Spanish Ministry of Universities, National Agency SEPIE, Spain.
- 23 November-1 December 2020 **Online Training Sessions for the Accreditation of Erasmus Experts (KA120)-Call, Erasmus+ 2020.** Spanish Ministry of Universities, National Agency SEPIE, Spain.
- 2-3 March 2020 **Training Sessions for Erasmus+ KA1 Evaluators.** Spanish Ministry of Universities, National Agency SEPIE, Madrid (Spain).
- 26 October 2018 Outreach session on “**Urban Waste Management and Circular Economy: Challenges and Initiatives**”. Ceit-IK4 and Gipuzkoa Provincial - Council, Donostia-San Sebastian (Spain).
- 30 April 2018 “**From Biomass to Bioproducts**”. Spanish Excellence Network on Sustainable Biorefinery (CTQ2016-81848-REDT). University of the Basque Country, School of Engineering of Gipuzkoa, Donostia-San Sebastian (Spain).
- June 2015 “**The Importance of Self-Editing**”. TECNUN, University of Navarra, Donostia-San Sebastian (Spain).
- 25 March 2010 “**Laboratories, do we work safely?**” Companies’Community University of Navarra, Donostia-San Sebastian (Spain).

- 20-21 September 2007 “**Course on SuperPro Designer and SchedulePro**”. University of Barcelona (Spain).
- February-March 2006 “**Successful presentations in English**”. Rovira i Virgili University, Tarragona (Spain).
- 17-27 January 2006 “**How to write a scientific article in English**”. Rovira i Virgili University, Tarragona (Spain).
- 13-15 September 2004 “**Pan-European Workshop: *How to Study and Control Fungal Contamination in Bottled Water***”. Micoteca from Universidade do Minho and CABI Bioscience. Universidade do Minho, Braga (Portugal).
- 10-13 May 2004 “**Planning and project management**”. Business School Caixanova. Vigo (Spain).
- 26-29 April 2004 “**Finances for not businessmen**”. Business School Caixanova. Vigo (Spain).
- 1-23 July 2003. “**German Practice**”. Official Language School of Vigo (Spain).
- 1 October-5 December 2002. “**Course on German as a foreign language for advanced learners**”. Urania, Graz (Austria).
- 19-30 April 1999. “**Course on Microsoft Power Point 97**”. University of Vigo (Spain).
- 7-25 September 1998. “**Course on Advanced English**”. Faculty of Arts. University of Vigo (Spain).
- 7-12 July 1997. “**Practical course on Plant Eco-physiology Techniques**”. Faculty of Sciences. University of Vigo (Spain).
- 1-3 July 1997. “**Course on computer-based statistical methods in designing thesis or project work**”. University of Vigo (Spain).
- 15-24 July 1996. “**Course on Synthesis, Properties and Processing of Polymers**”. University of Vigo (Spain).
- 30 October-3 November 1995. “**Course on Introduction to Internet**”. University of Vigo (Spain).
- 20 June-20 July 1994. “**Course on Introduction to Portuguese**”. Official Language School of Vigo (Spain).
- October 1993-March 1994. “**Course on Teacher Training**”. Institute for Educational Science. University of Santiago de Compostela (Spain).
- 1 December 1993-20 May 1994. “**Course on Marine Chemistry**”. University of Cádiz (Spain).
- 1-29 August 1991. “**Course on computers: MS-Dos, Word Perfect 5.1 Y DBase III**”. *Aula Informática de la Caja de Ahorros de Pontevedra*. Vigo (Spain).

Research stages abroad

2010

Environmental Biotechnology Centre. University of La Frontera. Temuco (Chile)

Two weeks (18th-31st October) invited by Dr. Olga Rubilar under the programme FONDECYT (Government of Chile)

2006

Institute of Environmental Biotechnology. Graz University of Technology. Graz (Austria)

Two months (5th July-30th August) working on the topic “Laccase immobilisation” invited by Professor Dr. Georg M. Gübitz

2005

Institute of Environmental Biotechnology. Graz University of Technology. Graz (Austria)

Three months (6th June-9th September) working on the topic “Laccases from bacteria” invited by Professor Dr. Georg M. Gübitz

2004

Department of Biological Engineering. University of Minho. Braga (Portugal)

Two months (1st July-1st September) working on the topic “Laccase production in bioreactors” invited by Professor Dr. José A. Teixeira

2003

Institute for Environmental Biotechnology. Graz University of Technology. Graz (Austria)

Two months (4th November-19th December) working on the topic “Organic synthesis catalysed by laccase from *Trametes hirsuta*” invited by Professor Dr. Georg M. Gübitz

2002

Institute for Environmental Biotechnology. Graz University of Technology. Graz (Austria)

Three months (24th September-20th December) working on the topic “Optimisation of the purification of laccase from *Trametes modesta*. Application to the degradation of textile dyes” invited by Professor Dr. Georg M. Gübitz

2001

Institute for Environmental Biotechnology. Graz University of Technology. Graz (Austria)

Three months (17th July-15th October) working on the topic “Purification and characterisation of laccase from *Trametes modesta*” invited by Professor Dr. Georg M. Gübitz

1996

VTT Biotechnology and Food Research. Espoo (Finland)

Three months (6th August-30th October) working on the topic “Production of ligninolytic enzymes” as a part of my doctoral thesis under the supervision of Dra. Liisa Viikari

Scholarships and awards

2022

Bentham Ambassador 2022-2023, Bentham Science Publishers Ltd.

2021

Visiting Professorship. Knowledge Foundation, Sweden. *Declined*

2019

Bentham Ambassador 2019-2020, Bentham Science Publishers Ltd.

Publons Peer Review Awards 2019. Recognition for placing in the top 1% of reviewers in Biology & Biochemistry on Publons global reviewer database

2018

Publons Peer Review Awards 2018. Recognition for placing in the top 1% of reviewers in Environment/Ecology

Publons Peer Review Awards 2018. Recognition for placing in the top 1% of reviewers in Biology & Biochemistry

2017

Publons Peer Review Awards 2017. Recognition as one of the top 1% of peer reviewers in Environmental Science

Publons Peer Review Awards 2017. Recognition as one of the top 1% of peer reviewers in Chemical Engineering

2016

The Sentinel of Science Awards 2016. Recognition as one of the 10% top of researchers contributing to peer review of the field of Environmental Science, Publons

2012

Certificate of excellence in reviewing. Journal of Environmental Management, Elsevier

2011

Cover picture. Biotechnology Journal, issue January 2011

2008-2010

Active Researcher. Rovira i Virgili University (Tarragona, Spain)

2008

I3 Professor. Recognition to an outstanding research activity. Spanish Ministry for Science and Education

2006

Scholarship for staying abroad. *Generalitat de Catalunya* (local government of Spain)

Positive evaluation by AQU (Catalan Agency for the Quality of the University System) for being an Associate Professor

2004

Scholarship for staying abroad. University of Vigo (Spain)

- 2003
Scholarship for staying abroad. University of Vigo (Spain)
Positive evaluation by ANECA (Spanish Agency for the Evaluation of Quality and Accreditation) for being an Associate Professor
- 2002
Scholarship for staying abroad. University of Vigo (Spain)
- 2001
Extraordinary Doctoral Prize. Academic year 1999-2000. University of Vigo (Spain)
Scholarship for staying abroad. Xunta de Galicia (local government of Spain)
- 1999-2000
Scholarship as an assistant teacher on practical lessons. University of Vigo (Spain)
Predoctoral Scholarship. University of Vigo (Spain)
- 1998-99
Scholarship as an assistant teacher on practical lessons. University of Vigo (Spain)
Predoctoral Scholarship. University of Vigo (Spain)
Scholarship for staying abroad. Xunta de Galicia (local government of Spain).
Declined
- 1997-98
Scholarship as an assistant teacher on practical lessons. University of Vigo (Spain)
Scholarship at Research & Development Office. University of Vigo (Spain)
- 1996-97
Scholarship as an assistant teacher on practical lessons. University of Vigo (Spain)
- 1995-96
Scholarship as an assistant teacher on practical lessons. University of Vigo (Spain)
Scholarship for staying abroad. University of Vigo (Spain)
- 1994-95
Scholarship as an assistant teacher on practical lessons. University of Vigo (Spain)

Languages

Spanish, mother tongue

English, C1-C2 level (Certificate of Aptitude, advanced level, from the Official Language School, Spain)

German, B2 level (Certificate of Aptitude, advanced level, from the Official Language School, Spain)

Portuguese, B1 level (DEPLE from the University of Lisbon, Portugal)

French, B1 level (Diploma from the Official Language School, Spain)

Galician, fluent

Catalan, basic knowledge

Computer knowledge

Windows XP, Windows 2000, Windows 95, MSOffice98, MSOffice97, Sigma Plot 4.0, Sigma Plot 7.1, Internet, SuperPro Designer, Polymath, Expert Design 7.0

Other diplomas

2016

Diploma on French (B1 level). Official Language School, Donostia-San Sebastian, Spain

2002

Diploma on Portuguese (B1 level). Camões Institute (Vigo, Spain) and Lisbon University (Lisbon, Portugal)

1999

Degree in English. Official Language School, Spain

1998

Degree in German Official Language School, Spain

1994

Certificate of Pedagogical Aptitude (CAP). Institute of Educational Sciences. University of Santiago de Compostela, Spain

Other professional activities

Editor of Books and Special Issues in Journals

Microbial Electrochemical System for Circular Economy. Shah, M.P., Jadhav, D., **Rodriguez-Couto, S.** (Eds.). **Cleaner and Circular Economy**, Elsevier. Ongoing.

Microbial Degradation and Detoxification of Environmental Pollutants Present in Industrial Wastewater. **Research in Microbiology**. Shah, M.P., **Rodriguez-Couto, S.** (Eds.). Elsevier. Ongoing

Environmental Remediation of Hazardous Pollutants: Microbial Approach. **IET Nanobiotechnology**. Shah, M.P., **Rodriguez-Couto, S.** (Eds.). Wiley. Ongoing

Global Challenges in Industrial Wastewater Treatment & Pollution Control. **SN Applied Science**. Shah, M.P., **Rodriguez-Couto, S.** (Eds.). Springer. Ongoing

Advanced Oxidation Processes for Tannery Effluent. Shah, M.P., **Rodriguez-Couto, S.** (Eds.). **Elsevier Inc.** Ongoing.

Development in Wastewater Treatment Research and Processes: Innovative Trends in Removal of Refractory Pollutants form Pharmaceutical Wastewater. **Rodriguez-Couto, S.**, Shah, M.P. (Eds.). **Elsevier Inc.** Ongoing.

Microbial Ecology and Community Structure of Wastewater Treatment Plant. **ChemBioEng Reviews**. Shah, M.P., **Rodriguez-Couto, S.** (Eds.). Wiley. Ongoing.

Wastewater Treatment Bio-refineries. **Biomass Conversion & Biorefinery**. Shah, M.P., **Rodriguez-Couto, S.**, Naushad, M. (Eds.). Springer. Ongoing.

Emergence of Wastewater Treatment Plants as Bio-refineries: A Way Forward to Energy and Resource Recovery. **Frontiers in Microbiology**. Shah, M.P., **Rodriguez-Couto, S.**, Naushad, M. (Eds.). EPFL, Lausanne, Switzerland. Ongoing.

Enzymes for Xenobiotic Pollutant Degradation-Green Approach towards Environmental Sustainability. **Green Technology, Resilience and Sustainability**. Shah, M.P., **Rodriguez-Couto, S.** (Eds.). Springer. Ongoing.

The Future of Bioremediation and Resource Recovery. **Microbial Biotechnology**. Shah, M.P., **Rodriguez-Couto, S.** (Eds.). Wiley. Ongoing.

Emerging and Innovative Technologies for Water and Wastewater Treatment. **Letters in Applied Microbiology**. Shah, M.P., Petrovski, S., **Rodriguez-Couto, S.** (Eds.). Wiley. Ongoing.

Advanced and Innovative Approach of Biofiltration in Wastewater Treatment Plants for the Sustainable Environment. **Bioengineered**. Shah, M.P., Bilal, M., Romaholo Ferreira, L.F., **Rodriguez-Couto, S.**, Verma, P., Naushad M. (Eds.). Taylor & Francis. Ongoing.

Smart Nanohybrid Constructs: Concept and Designing for Environmental Remediation. **Chemosphere**, 2022. Iqbal, H.M.N., Bilal, M., **Rodriguez-Couto, S.** (Eds.). Elsevier Inc.

Current Trends and Research in Industrial Wastewater Treatment through Bioreactor Approach. **Environmental Science & Pollution Research**, 2022. Shah, M.P., **Rodriguez-Couto, S.** (Eds.). Springer Nature, Springer International Publishing AG, Switzerland.

Mixed Contaminants: Occurrence, Interactions, Toxicity, Detection and Degradation. **Environmental Pollution**, 2022. Brar, S.T., Palanisami, T., **Rodríguez-Couto, S.**, Sathishkumar, P. (Eds.). Elsevier Inc.

Microbial laccases: Recent Advancements and Biotechnological Applications. Abdelmageed M.O., **Rodríguez-Couto, S.**, Mechichi, T. (Eds.). **Frontiers in Bioengineering and Biotechnology**, EPFL, Lausanne, Switzerland, 2022.

Development in Wastewater Treatment Research and Processes: Treatment and Reuse of Sewage Sludge: An Innovative Approach for Wastewater Treatment. Shah, M.P., **Rodríguez-Couto, S.**, Shah, N., Banerjee, R. (Eds.). **Elsevier Inc.** ISBN: 9780323855846, 19th August 2022.

Emerging Microbial Technologies for Wastewater Treatment. **Journal of Basic Microbiology** 62 (3-4), 2022. Shah, M.P., **Rodríguez-Couto, S.**, Banarjee, R. (Eds.). Wiley & Sons Inc., DOI: 10.1002/jobm.202200133.

Development in Wastewater Treatment Research and Processes: Microbial Ecology, Diversity and Functions of Ammonia Oxidizing Bacteria. Shah, M.P., **Rodríguez-Couto, S.** (Eds.). **Elsevier Inc.** ISBN: 9780323919012, 1st edition, 1st May 2022.

Development in Wastewater Treatment Research and Processes: Bioelectrochemical Systems for Wastewater Management. Shah, M.P., **Rodríguez-Couto, S.**, Nadda, A.K., Daverey, A. (Eds.). **Elsevier Inc.** ISBN: 9780323885058, 1st edition, 1st April 2022.

Development in Wastewater Treatment Research and Processes: Microbial Degradation of Xenobiotics through Bacterial and Fungal Approach. **Rodríguez-Couto, S.**, Shah, M.P. (Eds.). **Elsevier Inc.** ISBN: 9780323858397, 1st edition, 25th February 2022.

Recent and Future Trends in Water and Wastewater Research-ICAFEE 2021 (WR). **Energy Nexus**. Atabani, A., Shah, M.P., **Rodríguez-Couto, S.**, Kumar, S. (Eds.). Elsevier Inc., 2021.

An Innovative Role of Biofiltration in Wastewater Treatment Plants (WWTPs). Shah, M.P., **Rodríguez-Couto, S.**, Biswas, J. (Eds.). **Elsevier Inc.** ISBN: 9780128239469, 1st edition, 1st December 2021.

Development in Wastewater Treatment Research and Processes: Innovative Microbe-based Applications for Removal of Chemicals and Metals in Wastewater Treatment Plants. Shah, M.P., **Rodríguez-Couto, S.**, Kapoor, R.T. (Eds.). **Elsevier Inc.** ISBN: 9780323856577, 1st edition, 16th October 2021.

Development in Wastewater Treatment Research and Processes: Removal of Emerging Contaminants from Wastewater Through Bio-nanotechnology. Shah, M.P., **Rodríguez-Couto, S.**, Biswas, J. (Eds.). **Elsevier Inc.** ISBN: 9780323855839, 1st edition, 11th September 2021.

An Integration of Phycoremediation Processes in Wastewater Treatment. Shah, M.P., **Rodríguez-Couto, S.**, Vargas de la Cruz, C.B., Biswas, J. (Eds.). **Elsevier Inc.** ISBN: 9780128234990, 1st edition, 27th August 2021.

Membrane-based Hybrid Processes for Wastewater Treatment. Shah, M.P., **Rodríguez-Couto, S.** (Eds.). **Elsevier Inc.** ISBN: 9780128238042, 1st edition, 1st June 2021.

The Future of Effluent Treatment Plants: Biological Treatment Systems. Shah, M.P., **Rodríguez-Couto, S.**, Metha, K. (Eds.). **Elsevier Inc.** ISBN: 9780128229569, 1st edition, 28th May 2021.

Microbial Ecology of Wastewater Treatment Plants. Shah, M.P., **Rodriguez-Couto, S.** (Eds.). **Elsevier Inc.** ISBN: 9780128225035, 1st edition, 18th May 2021.

Wastewater Treatment Reactors: Microbial Community Structure. Shah, M.P., **Rodriguez-Couto, S.** (Eds.). **Elsevier Inc.** ISBN: 9780128239919, 1st edition, 12th May 2021.

New Trends in Removal of Heavy Metals from Industrial Wastewater. Shah, M.P., **Rodriguez-Couto, S.**, Kumar, V. (Eds.). **Elsevier Inc.** ISBN: 9780128229651, 1st edition, 23rd April 2021.

Recent Developments in Bioenergy Research. Gupta, V.K., Treichel, H., Kuhar, R.C., **Rodriguez-Couto, S.** (Eds.). **Elsevier Inc.** ISBN: 9780128195970, 1st edition, 21st June 2020

Emerging Technologies in Environmental Bioremediation. Shah, M.P., **Rodriguez-Couto, S.**, Sengor, S. (Eds.). **Elsevier Inc.** ISBN: 9780128198605, 1st edition, 18th April 2020.

Enzymes in Industrial Biotechnology. **Rodriguez-Couto, S.**, Agathos, S. (Eds.). **Frontiers in Biotechnology and Bioengineering**, EPFL, Lausanne, Switzerland, 2019.

Microbial Secondary Metabolites: Recent Developments and Technological Challenges. Singh, B.P., Rateb, M.E., **Rodriguez-Couto, S.**, Teixeira de Moraes Polizeli, M.L., Li, W.J. (Eds.). **Frontiers in Microbiology**, EPFL, Lausanne, Switzerland, 2019.

Microbial Wastewater Treatment. Shah, M.P., **Rodriguez-Couto, S.** (Eds.). **Elsevier Inc.** ISBN: 978-0-128-16809-7, 1st edition, 13th June 2019.

New and Future Developments in Microbial Biotechnology and Bioengineering: *Penicillium* System Properties and Applications. Gupta, V.K., **Rodriguez-Couto, S.** (Eds.). **Elsevier Inc.** ISBN: 978-0-444-63501-3, 1st edition, 12th September 2017.

Fungi and Their Interactions. **Rodriguez-Couto, S.** (Ed.). **Frontiers in Microbiology**, EPFL, Lausanne, Switzerland, 2017.

Oxidative Enzymes for Environmental Purposes. **Rodriguez-Couto, S.** (Ed.), **Frontiers in Bioscience**, USA, 2012.

Editor of International Scientific Journals

Biotechnology & Genetic Engineering Reviews (2022-current). Associate Editor. Taylor and Francis.

Frontiers in Fungal Biology, Associate Editor for Fungal Biotechnology (2021-current)

Current Research in Wastewater Management (2020-current). Co-editor in Chief. Trends Publications.

Frontiers in Microbiology. Guest Associate Editor for Microbiotechnology (2020-2022).

Frontiers in Chemical Engineering. Associate Guest Editor for Environmental Chemical Engineering (2020-2022).

African Journal of Biological Sciences. Subject Expert Editor (2018-current).

Frontiers in Bioengineering and Biotechnology. Associate Editor for Industrial Biotechnology (2018-current).

Frontiers in Microbiology. Guest Associate Editor for Microbiotechnology (2017-2020).
3Biotech, Springer International Publishing AG, part of Springer Nature. Associate Editor (2017-current).
Biosciences Biotechnology Research Asia. Managing Editor (2016-current).
The Scientific World Journal. Academic Editor for Biotechnology (2013-current).
International Journal of Applied Chemical Sciences Research. Editor (2013-current).
International Research Journal of Pure and Applied Chemistry. Academic Editor (2013-2018).

Editorial Board of International Scientific Journals

Bioresource Technology, Elsevier Inc. (2022-current).
Journal of Biotechnology Research Center, Al- Nahrain University, Iraq (2021-current).
Egyptian Journal of Botany, Egyptian Academy of Science and Technology (2018-current).
RSC Advances, Wiley & Sons Inc. Member of the reviewer panel (2016-current).
Turkish Bulletin of Hygiene and Experimental Biology. International Scientific Committee (2013-current).
Current Advances in Analytical Chemistry. Edinwilsen Press (2013-current).
International Journal of Biology, Pharmacy and Allied Sciences (2012-current).
Journal of Pharmaceutical & Scientific Innovations (2012-current).
World Journal of Pharmacology, Baishideng Publishing Group Inc., USA (2011-2018).
ISRN Journal of Xenobiotics, MDPI, Switzerland (2011-2023).
International Journal of Current Trends in Science and Technology (2010-current).
American Journal of Analytical Chemistry, Scientific Research Publishing Inc. (2010-current).
The Open Textile Journal, Bentham Open (2009-2013).
Food Technology and Biotechnology, University of Zagreb (2008).

Member of international scientific and expert committees

Member of the International Committee. **The International Conference on Alternative Fuels, Energy and Environment (ICAFEE 2023)**. Faculty of Engineering, Erciyes University, Kayseri city (Turkey), 6-8 October 2023.
Consultancy services for Project Peer Review of the **Science Fund of the Republic of Serbia**, July-December 2023.
Member of the Selection Board 11-Environment, Call E041-2023-01 Projects of Basic Research, National Council for Science, Technology and Technological Innovation (CONCYTEC), **PROCIENCIA**, Peru, April 2023

General Secretary, Division Board Member, Biobased Materials Division. **European Federation of Biotechnology**, since January 2023

Member of the Advisory & Review Committee. **4th International Symposium on Materials, Electrochemistry & Environment (CIMEE 2022)**. Theme: Advanced Green Chemistry and Sustainable Technology for Environmental Enhancement. Lebanese University, Beirut (Lebanon), 22-24 September 2022.

Advisory Board Member of the Division of Biobased Materials of the **European Federation of Biotechnology**, 2022

Member of the Selection Board 3-Environmental Sciences, Call E041-2022-01 Projects of Basic Research, National Council for Science, Technology and Technological Innovation (CONCYTEC), **PROCIENCIA**, Peru, June 2022

Board member of **SEPIE** (Spanish Service for the Internationalisation of Education) (2022-2024).

Member of the Committee for the **Clean Technologies 2020 Best Paper Awards**. March 2022.

Member of the International Committee. **The International Conference on Alternative Fuels, Energy and Environment (ICAFEE 2021)**. Faculty of Engineering, Erciyes University, Kayseri city (Turkey), 16-18 October 2021.

Consultancy services for Project Peer Review of the **Science Fund of the Republic of Serbia**, Novembre 2020-Novembre 2022.

International Advisor of the President's Advisory Committee. **Society for Green Environment. Government of India**, New Delhi (India), since April 2020.

Member of the International Advisory Committee. **5th International Conference on Recent Advancements in Chemical, Energy and Environmental Engineering (RACEEE 2020)**. Department of Chemical Engineering, SNN College of Engineering, Chennai (India), 13-14 February 2020.

Board member of **SEPIE** (Spanish Service for the Internationalisation of Education) (2019-2021).

Member of the International Committee. **2nd International Conference on Recent Advances in Agricultural, Environmental & Applied Sciences for Global Development (RAAEASGD-2019)**. Agro Environmental Development Society (AEDS), Majhra Ghat, Rampur UP, India, 27-29 September 2019.

Member of the International Committee. **2nd International Conference of Plant Sciences (ICPS-2018)**. Department of Botany, GC University, Lahore (Pakistan), 5-7 December 2018.

Member of the **DAAD** (German Academic Exchange Service) experts' committee, since 2010.

Peer Reviewer of Research Proposals

2023

Programme Erasmus+ 2021-2027. Erasmus+ Assessment of the Quality of the Applications of the Key Action KA1 (KA171-HED) in the Field of Higher Education. Spanish Service for the Internationalisation of Education (SEPIE), Spain.

“Evaluación de Fortalecimiento de Laboratorios”. National Council for Science, Technology and Technological Innovation (CONCYTEC), Peru.

“Proyectos de Investigación Básica 2do grupo”. National Council for Science, Technology and Technological Innovation (CONCYTEC), Peru.

“Alianzas Interinstitucionales para Programas de Doctorado”. National Council for Science, Technology and Technological Innovation (CONCYTEC), Peru.

“Proyecto de Investigación Aplicada”. National Council for Science, Technology and Technological Innovation (CONCYTEC), Peru.

“Proyectos de Investigación Básica 1er grupo”. National Council for Science, Technology and Technological Innovation (CONCYTEC), Peru.

2022

Programme Erasmus+ 2021-2027. Erasmus+ Consortium Accreditations in the Field of Vocational Education and Training (KA120-VET). Spanish Service for the Internationalisation of Education (SEPIE), Spain.

“Consortios Regionales de CTI”. National Council for Science, Technology and Technological Innovation (CONCYTEC), Peru.

“Proyectos de Investigación Aplicada, 2do Grupo”. National Council for Science, Technology and Technological Innovation (CONCYTEC), Peru.

2nd Call IS_MIRRI21 (Implementation and Sustainability of Microbial Resource Research Infrastructure for the 21st Century) Transnational Access (TNA) Program. Horizon 2020.

“Proyectos de Investigación Básica 2022-01”. National Council for Science, Technology and Technological Innovation (CONCYTEC), Peru.

DAAD-Spain. Reviewer of the annual grants for postgraduate studies and research 2022.

Mobility Projects for Higher Education Students and Staff Supported by External Policy Funds (KA171-HED), Erasmus+ 2022 Call. Spanish Service for the Internationalisation of Education (SEPIE), Spain.

Knowledge Foundation (KK-S), Sweden.

2021

Programme Erasmus+ 2021-2027. Erasmus+ Consortium Accreditations (KA130). Spanish Service for the Internationalisation of Education (SEPIE), Spain.

Program IDEAS. Science Fund of the Republic of Serbia.

1st Call IS_MIRRI21 (Implementation and Sustainability of Microbial Resource Research Infrastructure for the 21st Century) Transnational Access (TNA) Program. Horizon 2020.

“Proyectos de Investigación Básica Grupo 3”. National Council for Science, Technology and Technological Innovation (CONCYTEC), Peru.

Programme Erasmus+ 2021-2027. Erasmus+ Consortium Accreditations (KA130). Spanish Service for the Internationalisation of Education (SEPIE), Spain.

“Competitive Programme for Rated Researchers”. National Research Foundation (NRF) of South Africa.

2020

Programme Erasmus+ 2020. Erasmus Accreditations (KA120). Spanish Service for the Internationalisation of Education (SEPIE), Spain.

Programme Erasmus+ 2020. Action Key 1 Spanish Service for the Internationalisation of Education (SEPIE), Spain.

DAAD-Spain. Reviewer of the annual grants for postgraduate studies and research 2020.

2019

DAAD-Spain. Member of the Life Sciences reviewers’ panel for the annual grants for postgraduate studies and research 2019.

“Proyectos de Investigación Científica y Tecnológica”. Scientific and Technological Research Fund (FONCyT), Argentina.

2018

University of Oviedo. Research projects.

PRELUDIUM 14. Expert reviewer of panel NZ9 Applied Life Sciences and Biotechnology. National Science Centre of Poland.

“Convocatoria para Proyectos de Ciencia, Tecnología e Innovación y su Contribución a los Retos del País”. Reviewer and member of the reviewers’ board Remediation. Administrative Department of Science, Technology and Innovation (COLCIENCIAS), Colombia.

2017

SONATA 12. Expert reviewer of panel NZ9 Applied Life Sciences and Biotechnology. National Science Centre of Poland.

Competitive Programme for Rated Researchers 2017. National Research Foundation (NRF), South Africa.

“Proyectos de Investigación Científica y Tecnológica 2017”. Scientific and Technological Research Fund (FONCyT), Argentina.

2016

South Africa/Germany Science and Technology Cooperation. Call for Applications for Joint Projects 2017-2020. National Research Foundation (NRF), South Africa.

“Convocatoria para Proyectos de Ciencia, Tecnología e Innovación y su Contribución a los Retos del País”. Reviewer and member of the reviewers’ panel 3-45. Administrative Department of Science, Technology and Innovation (COLCIENCIAS) Colombia.

2015

South Africa/Taiwan Joint Science and Technology Research Collaboration 2016. National Research Foundation (NRF), South Africa.

2014

Research Development Grants for Y Rated Researchers 2015. National Research Foundation (NRF), South Africa.

“Proyectos de Investigación Científica y Tecnológica 2014”. Scientific and Technological Research Fund (FONCyT), Argentina.

2013

University Research Funding of Cape Peninsula University of Technology (CPU), South Africa.

2012

“Proyectos de Investigación Científica y Tecnológica 2012”. Scientific and Technological Research Fund (FONCyT), Argentina.

French National Research Agency (ANR).

2011

“Proyectos de Investigación Científica y Tecnológica 2011”. Scientific and Technological Research Fund (FONCyT), Argentina.

Netherlands Organization for Scientific Research (NWO), The Netherlands.

Ministry of Education and Science from Republic of Kazakhstan.

2010

“Convocatoria PICT Bicentenario”. Scientific and Technological Research Fund (FONCyT), Argentina.

“Concurso de Iniciación en Investigación 2010”. National Commission for Scientific and Technological Research (CONICYT), Chile.

Assessment of research outputs and standing of scientific researchers

2022

Promotion to Associate Professor. Department of Biology. Prince Sattam bin Abdulaziz University, Kingdom of Saudi Arabia.

2021

Docentship assessment. University of Helsinki, Finland.

Rating Call 2021. South Africa’s National Research Foundation (NRF).

2020

Promotion to Associate Professor. King Saud University (KSU), Kingdom of Saudi Arabia.

2019

Promotion to Assistant Professor. GC University Lahore, Pakistan

2018

Evaluation and Rating of Individual Researchers 2018. South Africa's National Research Foundation (NRF).

2012

External referee for the award of *habilitation* degree (*venia docendi*) in the field of Environmental Biotechnology, Graz University of Technology, Austria.

Rating Application 2012. South Africa's National Research Foundation (NRF).

Examiner of doctoral and master thesis

Examiner of PhD theses: Cairo University, Egypt (2010 2 times, 2011, 2012, 2013, 2014 2 times, 2016, 2018, 2021); Bharathiar University, Coimbatore, India (2015); Dr. B. R. Ambedkar National Institute of Technology, Jalandhar, India (2018); University of Karachi, Pakistan (2015)

Examiner of MSc theses: Cairo University, Egypt (2011, 2012, 2013 2 times, 2015, 2016 2 times, 2017 4 times, 2022, 2023), University of Antioquia, Colombia (2015); University of Western Cape, South Africa (2015), LUT University (2022 2 times).

Jury member of doctoral dissertations: Rovira i Virgili University (2007), University of the Basque Country (2009), University of Minho (2023)

Outreach activities

Coordinator of my research group (Bioengineering and Bioelectrochemistry Group) in the Science Week. Department of Chemical Engineering, Rovira i Virgili University, Tarragona, Spain, 2007.

Advisor in the 2017-2018 edition of the project *Zientzia Azoka* (Science Fair) Elhuyar Foundation, Basque Country, Spain.

Advisor in the 2016-2017 edition of the project *Zientzia Azoka* (Science Fair) Elhuyar Foundation, Basque Country, Spain.