



Europass Curriculum Vitae

Personal information

Dina Maria Ribeiro Mateus

Escola Superior de Tecnologia de Tomar
Instituto Politécnico de Tomar
Estrada da Serra, Campus da Quinta do Contador, 2300 313, Tomar, Portugal
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Gender: Female Date of birth: 09.07.1965 Nationality: Portugal
ORCID ID: 0000-0001-8374-3384

Work experience

Dates 1997 onwards

Occupation or position held Professor /Researcher

Main activities and responsibilities

In charge of several curricular units in the fields of chemical technology and biotechnology in bachelor's and master's degree courses and in technological specialization courses. Supervisor of final projects of bachelor's and master's degree courses. Author of several scientific publications reporting research projects in the field of industrial and environmental Biotechnology. Coordination and participation in various committees for the creation/adaptation of first and second-cycle degree courses. Member of organizing committees of conferences in the area of chemical engineering and environmental engineering. Regular member of the jury in master's degree public discussions.

Member of the Scientific and Technical Council, 2012 onwards.
Head of the Master's Degree in Chemical Technology, 2009 onwards.
Member of the General Council, 2006-2010.
Head of the Chemical Technology scientific area, 2003-2011.
Member of the Scientific Council, 2000-2011.

Scientific research activities on the domains of biotechnology, chemical and environmental technologies: constructed wetlands for wastewater treatment; microalgae for biofuel production; water quality conservation and green energy production.

Teaching subjects
(last five years)

Environmental Engineering (Undergraduate level)
Bioreactors (Undergraduate level and 1st cycle)
Food biotechnology (Undergraduate level and 2nd cycle)
Mass and energy transport phenomena (1st cycle)
Introduction to chemical and biochemical engineering (1st cycle)
Genetic engineering (1st cycle)
Enzymatic Engineering (1st cycle)
Bioprocess Engineering (2nd cycle)
Design of Chemical plants (2nd cycle)

Name and address of employer

Tomar Polytechnic Institute, Campus da Quinta do Contador, Estrada da Serra, 2300-313 Tomar, Portugal

Type of business or sector

Public Higher Education Institute / Research Centre

Dates 2011 onwards

Occupation or position held Researcher

Main activities and responsibilities Scientific research activities focused on the domains of biotechnology applied to the biodegradation of cultural heritage, decay mechanisms and control methods.

Supervisor of the doctoral thesis in Environmental Sciences and Engineering, 'Phosphorus removal and sugarcane production in constructed wetlands for wastewater treatment', Universidade de Aveiro, 2012-2016.

Reviewer of scientific journals belonging to Elsevier and Wiley groups, among others.

Name and address of employer GEOBIOTEC - GeoBioSciences, GeoTechnologies and GeoEngineering (GEOBIOTEC/UA)
Campus de Santiago, 3810-193 Aveiro

Type of business or sector Research Centre

Dates 1992 - 1999

Occupation or position held Ph.D. Grantee, 1994-1999, doctoral fellowship from the Portuguese Government Research Agency [FCT]. Supervisors: Prof. Dr. Manuela Fonseca and Prof. Dr. Sebastião Alves.
MSc Grantee, 1992 -1994, fellowship from the Portuguese Government Research Agency [FCT]. Supervisors: Prof. Dr. Manuela Fonseca and Prof. Dr. Sebastião Alves.

Main activities and responsibilities Research in the field of biotechnology: kinetic, mass transfer and hydrodynamic studies in a liquid-impelled loop bioreactor, application to L-tryptophan production.

Name and address of employer Centro de Engenharia Biológica e Química, Chemistry Department, Instituto Superior Técnico, Technical University of Lisbon, Avenida Rovisco Pais 1049-001 Lisboa.
Portugal

Type of business or sector Research Centre/Public Higher Education Institute

Dates 1990 – 1992

Occupation or position held Research Trainee, 1990-1992. Supervisor: Prof. Dr. José Carlos Pereira.

Main activities and responsibilities Research in the field of fluid mechanics: development of a Fortran program for the numeric resolution of the transport equations aimed at the optimization of combustion systems.

Name and address of employer Mechanical Department, Instituto Superior Técnico, Technical University of Lisbon, Avenida Rovisco Pais 1049-001 Lisboa
Portugal

Type of business or sector Research Centre/Public Higher Education Institute

Education and training

Dates 1994-1999

Level in national or international Principal subjects/occupational skills covered PhD
Thesis Title: 'Hydrodynamics and global kinetics of a liquid-impelled loop reactor: application to L-tryptophan production'

Name and type of organisation classification Instituto Superior Técnico, Technical University of Lisbon, Lisbon, Portugal

Dates 1992-1994

Level in national or international Principal subjects/occupational skills covered MSc
Thesis Title: 'Kinetics and mass transfer studies in a liquid-impelled loop bioreactor'

Name and type of organisation classification Instituto Superior Técnico, Technical University of Lisbon, Lisbon, Portugal
Very Good

Dates 1984-1990

Level in national or international
Name and type of organisation
classification

Bachelor of Chemical Engineering
Instituto Superior Técnico, Technical University of Lisbon, Lisbon, Portugal
Good

Research activities

Research projects

VALORBIO - Wastes valorisation through modular constructed wetlands for wastewater treatment-023314 (AAC 02/SAICT/2016).

Análises laboratoriais de índole hidráulica e de solos (Soils hydraulic permeability essays), no âmbito do projecto "Optimização de sistemas de tratamento de águas residuais por plantas hidrófitas". Supported by Comissão de Coordenação e Desenvolvimento Regional do Centro, 2006 (Coordinator researcher).

Monitoring of nutrients removal in pilot-scale constructed wetlands. Supported by Maxit, S.A., 2005 (Coordinator researcher).

Evaluation of light weight expanded clays aggregates as constructed wetland fillers. Supported by Leca Portugal, S.A., 2002-2003 (Coordinator researcher).

Engenharia de células imobilizadas (PRAXIS 2/2.1/BIO/37/94)(1995-1998)

Bio-reactores multifásicos (PRAXIS 2/2.1/BIO/1061/95)(1996-1999)

Relevant publications

Scopus Author ID
8058098800

Papers in peer-reviewed journals

Valorisation of phosphorus-saturated constructed wetlands for the production of sugarcane, Mateus, D. M. R., Vaz, M. M. N., Pinho, H. J. O., **Journal of Technology Innovations in Renewable Energy**, 6, 1, 1-6 (2017) <http://dx.doi.org/10.6000/1929-6002.2017.06.01.1>

The Potential Growth of Sugarcane in Constructed Wetlands Designed for Tertiary Treatment of Wastewater, Dina M.R. Mateus, Mafalda M. Vaz, Isabel Capela, Henrique J.O. Pinho, **Water**, 8, 93 1-14 (2016).

Sugarcane as constructed wetland vegetation: preliminary studies, Dina M.R. Mateus, Mafalda M. Vaz, Isabel Capela, Henrique J.O. Pinho, **Ecological Engineering**, 62, 175-178 (2014).

Diversidade microbológica do edifício da Sacristia Incompleta do Convento de Cristo, em Tomar, e avaliação do seu controlo por biocidas, Dina M. R. Mateus, Renata B. Silva, Fernando M. C. Costa, João P. F. Coroado, **Conservar Património** 17, 11-20 (2013) (in Portuguese). (DOI:10.14568/cp2012005),

Fragmented limestone wastes as a constructed wetland substrate for phosphorus removal, Dina M.R. Mateus, Mafalda M.N. Vaz, Henrique J.O. Pinho, **Ecological Engineering** 41, 65–69 (2012).

Phosphorus removal by expanded clay - six years of pilot-scale constructed wetlands experience, D.M.R. Mateus, H.J.O. Pinho, **Water Environment Research**, 82, 128-137 (2010).

Diffusion in cell-free and cell immobilising carrageenan gel beads with and without chemical reaction, D.M.R. Mateus, S.S. Alves, M.M.R. da Fonseca **Biotechnology and Bioengineering**, 63, 625-631, (1999).

Hydrodynamics and mass transfer in a liquid-impelled loop reactor, D.M.R. Mateus, M.M.R. da Fonseca, S.S. Alves, **Industrial & Engineering Chemistry Research**, 35, 4559-4565 (1996).

Performance of a liquid-impelled loop reactor with immobilized cells, M.M.R. da Fonseca, S.S. Alves, D.M.R. Mateus, in **Immobilized cells: Basics and Applications**, Progress in Biotechnology, R.H. Wijffels, R.M. Buitelaar, C. Bucke and J. Tramper (Eds), Elsevier, Amsterdam, 11, 511-517, (1996).

Model for the production of L-tryptophan from L-serine and indole by immobilized cells in a three-phase liquid impelled loop reactor, D.M.R. Mateus, S.S. Alves, M.M.R. da Fonseca, **Bioprocess Engineering**, 14, 151-158 (1996).

Books /Book chapters

Fundamentos de transferência de calor, Dina M.R. Mateus, Edição do Instituto Politécnico de Tomar, 2009 (ISBN: 978-972-9473-40-1) (in Portuguese).

Transferência de calor e esterilização, D.M.R. Mateus e M. Manuela Fonseca, em Reactores Biológicos, M. Manuela da Fonseca e José A. Teixeira (Eds), LIDEL, 2007 (ISBN-10: 972-757-366-5; ISBN-13: 978-972-757-366-0) (in Portuguese).

Proceedings (last five years)

Henrique J.O. Pinho, Mafalda M.N. Vaz, Dina M.R. Mateus. Comparative evaluation of low cost materials as constructed wetland filling media. Proceedings of the 13th International Conference of Computational Methods in Sciences and Engineering, Thessaloniki, Greece, 2017.

Henrique J.O. Pinho, Dina M.R. Mateus, Sebastião S. Alves. Computation of bubble mean diameters using probability distribution functions. Proceedings of the 13th International Conference of Computational Methods in Sciences and Engineering, Thessaloniki, Greece, 2017.

Mafalda M.N. Vaz, Dina M.R. Mateus, Henrique J.O. Pinho. Incremento da sustentabilidade de zonas húmidas construídas através da produção de cana-de-açúcar. Atas do 1º Simpósio Luso-Brasileiro sobre modelos e práticas de sustentabilidade, Lisboa, Portugal, 11-12, Julho. 2016, (428-436).

Dina M.R. Mateus, Henrique J.O. Pinho Valorização de águas residuais tratadas por leitos de macrófitas através da produção integrada de microalgas. Atas do 1º Simpósio Luso-Brasileiro sobre modelos e práticas de sustentabilidade, Lisboa, Portugal, 11-12, Julho. 2016, (817-823).

Dina M.R. Mateus, Mafalda M.N. Vaz, Henrique J.O. Pinho. Improving the sustainability of CW for wastewater treatment. Proceedings of the WETPOL 2015 - 6th International Symposium on Wetland Pollutant Dynamics and Control, York, UK, 13-18 Sep.2015, (372.373).

Vaz, M.M.N, Mateus, D.M.R, Pinho, H.J.O., & Capela, I., (2014). Educação ambiental e para a sustentabilidade: o projeto “mini-tanques de plantas macrófitas”. Atas do 1º Congresso Internacional Educação Ambiente e Desenvolvimento, Leiria, 13-15 Nov. 2014 (1-8).

Mateus, D.M.R., Ponte, S., Coroado, J. P. F., & Rocha, F. J. F. (2014). Tabulae at the Convento de Cristo in Tomar – study of biological colonization. Proceedings of the 12th International Chemical and Biological Engineering Conference, Porto, 10-12 Sep.2014 (40-42).

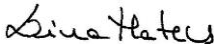
Mateus, D.M.R., Vaz, M.M.N., Capela, I., & Pinho, H.J.O. (2014). Use of sugarcane as constructed wetland vegetation. Proceedings of the 12th International Chemical and Biological Engineering Conference, Porto, 10-12 Sep. 2014 (60-62).

Grilo, L. M., Mateus, D. M. R., Alves, A. C., & Grilo, H. L. (2014). Robust control charts in industrial production of olive oil. 10th International Conference of Computational Methods in Sciences and Engineering (ICCMSE 2014), AIP (American Institute of Physics) Conf. Proc. 1618, 539-542; doi: 10.1063/1.4897794.

Vaz, M., Branco, R., Pinho, H., Capela, I., & Mateus, D. (2013). Zonas húmidas construídas para tratamento terciário de efluentes: uma tecnologia ecológica e sustentável. Atas do XII Congresso Nacional de Engenharia do Ambiente e 10ª Conferência Nacional do Ambiente, Aveiro, Portugal, 6-8 Nov. 2013 (369-374).

Pinho, H., Duarte, S., Granchinho, P., & Mateus, D. (2013). Integração da produção de algas para fins energéticos no tratamento biológico de efluentes líquidos. Comunicação em painel. XII Congresso Nacional de Engenharia do Ambiente e 10ª Conferência Nacional do Ambiente, Aveiro, Portugal, 6-8 Nov. 2013 (899-900).

Tomar, 20 de junho de 2017


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