

Europass Curriculum Vitae



Personal information

Title	Eng.	
First name(s) / Surname(s)	LEITÃO, PEDRO CHAMBEL FILIPE LOPES	
Address		
Telephone(s)	+351218419424	Mobile
E-mail(s)	chambelpc@ist.utl.pt	
Nationality	Portuguese	
Date of birth	21 May 1973	
Gender	Male	

Occupational field **university teaching professional**

Work experience

Since 2000 it has participated in many **research and engineering projects**, having specialized in two specific areas, **soil modeling** and **watershed modeling**. In soil modeling it has dedicated to the development and application of a hydrodynamic model for soil in MOHID system and it has also applied other soil models. In watershed modeling it has applied SWAT model to several Portuguese watersheds and watersheds located in Brazil, Argentina and Chile. He is a member of the scientific committee of SWAT since 2009. Since 2009, he worked in several Management Plans of four Portuguese Hydrographic regions (RH6, RH7, RH8, and RH10), where he used modelling tools extensively.

Dates	1997 → present
Institution	IST/ Universidade Técnica de Lisboa
Occupation or position held	Research on Environmental Modelling
Name and address of employer	IST Av Rovisco Pais, 1049-001 Lisboa, Portugal

Education and training

Present	Preparation of Ph. D. in Environmental Sciences
Organization	Instituto Superior Técnico – Technical University of Lisbon
Title of qualification awarded	Ph. D.
1997 - 2000	Master of Science in Mechanical Engineering
Organization	Instituto Superior Técnico – Technical University of Lisbon
Title of qualification awarded	Master of Science
1991 - 1997	Agronomist
Organization	Instituto Superior Agronomia – Technical University of Lisbon

**Research
Project Coordinator**

International Projects

- **Aquapath-Soil** (ESA, European Spatial Agency) <http://www.agro-evapo.eu/>. Development of operational service to support irrigation based on LAI satellite images ((2009-2012)

National Projects

- **Modelling of trophic processes in artificial reservoirs and of respective basin loads** funded by the Portuguese Government (INAG, 2010-2011)

Principal Investigator

International Projects

- FIGARO (FP7) <http://www.figaro-irrigation.net/> Development of technics to improve water irrigation productivity (2013 – 2016)
- SenSyf (FP7) <http://www.sensyf.eu/> Development and testing of new processing chains and Sentinel and Copernicus/GMES data based on tools (including models) running on the cloud. (2013 – 2015)
- MyWater (FP7) <http://www.mywater-fp7.eu/> Overall, MyWater will provide reliable information on water quantity, quality and usage for appropriate water management, improving knowledge and creating the forecasting capabilities necessary to catchment managers, and at the same time optimizing the ratio cost/benefit of water resources monitoring (2011-2013)
- LENVIS (FP7) <http://www.lenvis.eu/> aimed to develop an innovative collaborative decision support network over the Internet for exchange of localized environmental and health services between stakeholders, with a focus on air and water quality issues (2009-2012)
- TempQsim (FP6) http://ftp.ija.csic.es/qt/erosio/Eng/Proyectoseng/TempQsim_eng.htm Evaluation and improvement of water quality models for application to temporary waters in Southern European catchments (2002-2005)
- ICRew (Interreg IIIb) Aimed to develop technologies to support the implementation of the bathing waters directive. (2003 – 2006)

National Projects

- Eutrophos (FCT) <http://eutrophosproject.wordpress.com/> Integrated Phosphorous Management for controlling eutrophication in watersheds (2010-2013)

Other Projects

- DyePlume (FCT) <http://climetua.fis.ua.pt/legacy/dyeplume/> Climate Change Impacts on Estuarine Dynamics and their coastal plumes. (2011-2013).

Personal skills and competences

Mother tongue(s) **Portuguese**

Other language(s)

Self-assessment

European level (*)

	Understanding		Speaking		Writing	
	Listening	Reading	Spoken interaction	Spoken production		
English	B2 Independent user	C1 Proficient user	B2 Independent user	B2 Independent user	B2 Independent user	B2 Independent user
French	A1 Basic User	B1 Independent user	A1 Basic User	A1 Basic User	A1 Basic User	A1 Basic User
Spanish / Castilian	A1 Basic User	B1 Independent user	A1 Basic User	A1 Basic User	A1 Basic User	A1 Basic User

(*) [Common European Framework of Reference \(CEF\) level](#)

Social skills and competences Team spirit, good communication skills, good ability to adapt to multicultural environments. These skills are a result of the many international contacts and of the participation in many international projects.

Organisational skills and competences Good experience in international project team management.

Technical skills and competences Modelling on inland environments

Computer skills and competences FORTRAN Programing.

Publications

BOOK CHAPTERS

1. **Chambel-Leitão P.** (2008) Load and flow estimation: HARP-NUT guidelines and SWAT model description. In Perspectives on Integrated Coastal Zone Management in South America R Neves, J Baretta & M Mateus (eds.). IST Press, Lisbon, Portugal. (ISBN: 978-972-8469-74-0)
2. Yarrow, M., **Chambel-Leitão P.** (2008) Estimation of loads in the Aysén Basin of the Chilean Patagonia: SWAT model and Harp-Nut guidelines. In Perspectives on Integrated Coastal Zone Management in South America R Neves, J Baretta & M Mateus (eds.). IST Press, Lisbon, Portugal. (ISBN: 978-972-8469-74-0)
3. **Chambel-Leitão P.** Sampaio. A., Almeida, P. (2008) Load and flow estimation in Santos watersheds. In Perspectives on Integrated Coastal Zone Management in South America R Neves, J Baretta & M Mateus (eds.). IST Press, Lisbon, Portugal. (ISBN: 978-972-8469-74-0)

PAPERS IN SCIENTIFIC JOURNALS

4. Deus, R; Brito, D; Kenov, I; Almeida, C; **Chambel-Leitão P**, Neves R; Alves C N, (2012) Use of SWAT model for hydrological and water quality assessment of the Tocantins-Araguaia basin, Brazil. Accepted for publication in Ecological Modeling.
5. Durão A, **Chambel-Leitão P**; Brito D; Neves R; Morais, M. (2012) Estimation of pollutant loads in Ardila watershed using the SWAT model. Accepted for publication in Journal of Environmental Science and Engineering.
6. Campuzano FC; Mateus MD; Leitão, PC; **Chambel-Leitão P**; Marín, VH; Delgado LE; Tironi A; Pierini JO; Sampaio AJ; Almeida P; Neves R (2011) Integrated coastal zone management in South America: a look at three contrasting systems. Ocean & Coastal Management. Accepted for publication.
7. Trancoso AR, Braunschweig F, **Chambel-Leitão P**, Obermann M, Neves R (2009) An advanced modelling tool for simulating complex river systems. Science of the Total Environment 407, 3004–3016.

Papers in National Journals

8. Barão L., **Chambel-Leitão, P.**, Ramiro N., Gonçalves M.C., Ramos T.B., Castanheira, N. (2008) Simulation of water dynamics in two irrigated soils. Terceiro Congresso Ibérico de Ciência do solo, 1 a 4 de Julho. Aceite para publicação na Revista de Ciências Agrárias.
9. Gonçalves, M. C., Ramos, T. B., Šimunek, J. M. J. Neves, J. C. Martins F P. Pires & **Chambel-Leitão P.** (2007) Modelação da dinâmica da água e dos sais num Aluviossolo regado com águas de diferente qualidade: ensaio de validação do modelo HYDRUS-1D com observações em monólitos. Rev. de Ciências Agrárias, jul. 2007, vol.30, no.2, p.38-52. ISSN 0871-018X.

10. Neves, R. **Chambel-Leitão, P.**, Leitão P.C., Fernando, R.M., Cameira, M.R. (2001) Ciências do Solo, Modelação Matemática e Interdisciplinaridade. 1º Congresso Nacional das Ciências do Solo. Aceite para publicação na Revista de Ciências Agrárias. Lisboa.
11. Neves R., **Chambel-Leitão, P.**, Leitão P.C. (2000) Modelação numérica da circulação da água no solo. O modelo MOHID. *Pedologia*, Oeiras 28: 46-55.

Papers & Abstracts International Proceedings

12. **Chambel-Leitão P.**, Almeida C., Jauch E., Trancoso R., Neves R., Leitão, J. (2011) Evapotranspiration forecast using SWAT model and weather forecast model. Submitted to the proceedings of the 2011 International SWAT Conference - Toledo, Spain.
13. **Chambel-Leitão P.**, Almeida C., Malhadas M., Silva, A., Leitão, P. (2011) Acoplamento de modelo de bacia hidrográfica ao modelo mohid water no estuário do sado. Publicado nas actas do VI Congresso sobre Planeamento e Gestão das Zonas Costeiras dos Países de Expressão Portuguesa. Cabo Verde, 4-8 de Abril.
14. Leitão J. C., **Chambel-Leitão P.**, Cota T., Almeida C., Fulgêncio C., Grade, Simão M., Bettencourt P., Disponibilidades de água, em regime natural e modificado, nas regiões hidrográficas do Alentejo e Algarve, 11º Water Congress, Porto, 6 - 8 February 2012
15. Malhadas M S, **Chambel-Leitão P.**, Ribeiro J, Silva A, Leitão P and Cota T. Sistema integrado de simulação de cheias no Estuário do Espírito Santo (Baía de Maputo, Moçambique). 2.as Jornadas de Engenharia Hidrográfica, 20-22 June 2012, Lisbon, Portugal. Extended abstracts: 135-138.
16. Almeida C, **Chambel-Leitão P.**, Jauch E, Neves R, "SWAT LAI calibration with local LAI measurements", Proc. of 2011 International SWAT Conference & Workshops - Toledo, Spain, June 2011, pp. 113-126.
17. Almeida C, **Chambel-Leitão P.**, Jauch E, Neves R, Almas L, (2011) "Serviço de apoio à produção agrícola com optimização dos usos de rega no Vale do Sorraia", Livro das Jornadas Técnicas APRH: A Engenharia dos Aproveitamentos Hidroagrícolas, Lisboa, Portugal, Outubro de 2011, pp. 583-595..;
18. **Chambel-Leitão P.**, Almeida C., Amaral A., Timóteo G., Malhadas M., Neves R., Cayrol P., Coelho H (2010) Quantificação do impacto da agricultura na qualidade da água do Umbeluzi (Moçambique) usando modelos e imagens de satélite. Publicado nas actas do 14º congresso do simpósio luso-brasileiro de Engenharia sanitária e ambiental.
19. Canas A., **Chambel-Leitão P.**, Braunschweig F. (2010) Study of runoff variability in a forest fire scenario for the Trancão River basin. Publicado nas actas do 5º Congresso Internacional sobre Ordenamento do Território.
20. Coelho H. & **Chambel-Leitão P.** (2010) Modelação integrada de bacias e albufeiras: os casos do Pocinho e do Enxoé. Integrated modelling of watershed and reservoirs: Pocinho and Enxoés cases. *Revista da APRH*. Vol. 31, nº1.
21. R. Neves, P. Galvao, F. Braunschewig **Chambel-Leitão P.** (2007) New Approaches to Integrated Watershed Modeling. Proceedings of SPS (NFA) 5th Workshop on Sustainable Use And Development Of Watersheds For Human Security And Peace October 22-26, 2007 Istanbul, TURKEY
22. **Chambel-Leitão P.**, F. Braunschweig, L. Fernandes, R. Neves, P. Galvão. (2007) Integration of MOHID model and tools with SWAT model, submitted to the Proceedings of the, 4th International SWAT Conference, July 2-6 2007.
23. M. Yarrow, **P. Chambel-Leitão.** (2007) Simulating Nothfagus forests in the Chilean Patagonia: a test and analysis of tree growth and nutrient cycling in swat. Submitted to the Proceedings of the , 4th International SWAT Conference July 2-6 2007.
24. M. Yarrow, **P. Chambel-Leitão** (2006) Calibration of the SWAT model to the Aysén basin of the Chilean Patagonia: Challenges and Lessons. Proceedings of the Watershed Management to Meet Water Quality Standards and TMDLS (Total Maximum Daily Load) 10-14 March 2007, San Antonio, Texas 701P0207.
25. Venancio A, Martins F, **P. Chambel-Leitão**, Neves R. Modelacao hidrologica da bacia drenante da albufeira de pracana Faro: V Congresso Iberico; 4-8 December, 2006.
26. Ramos, T. B., Prazeres, A, Castanheira, N.L., **Chambel-Leitão, P.**, Pires F.P., Reis, J, Gonçalves M.C., Martins J.C., Santos, F.L. 2006. Monitorização do teor de água do solo num Fluvisso e num Antrossolo e simulação com o modelo HYDRUS-1D. [Monitoring of soil water water in Fluvisol and Antrosol soils and simulation with the HYDRUS-1D model], In Bellinfante, Nocolás & Jordán, Antonio (eds), Tendencias Actuales de la Ciencia del Suelo, pp. 103-109. University of Sevilla, Spain.
27. P. Galvão, **Chambel-Leitão, P.**, P. Leitão, R. Neves. (2004) A different approach to the

modified Picard method for water flow in variably saturated media. Computational Methods in Water Resources. Chapel Hill, North Carolina USA. ELSEVIER SBN-13: 978-0-444-51769-2, ISBN-10: 0-444-51769-3.

28. P. Galvão, R. Neves, A. Silva, **Chambel-Leitão P.** & F. Braunschweig (2004) Integrated Watershed Modeling. Proceedings of MERIS User Workshop ESA-ESRIN, Frascati, Italy May 2004.
29. Mateus, V., D. Brito, **Chambel-Leitão P.** e M. Caetano, 2009. Produção e utilização de cartografia multi-escala derivada através dos sensores LISSIII, AWiFS e MERIS para modelação da qualidade da água para a Bacia Hidrográfica do Rio Tejo, Actas da VI Conferência Nacional de Cartografia e Geodesia (CNCG 2009), 7 - 8 Maio 2009, Caldas da Rainha, Portugal, em publicação.