

# Jorge Humberto Amorim

## PUBLICATIONS LIST

Updated in February 2017

---

### Author bibliometrics

Peer-reviewed publications: 17 in Web of Science (h-index: 7), 34 in Scopus (h-index: 9)

Total number of citations: 203 in Web of Science, 256 in Scopus

Books or chapters of books: 33

Papers in International Conference Proceedings with peer-review: 55

### International scientific journals with referee

Samson R, Moretti M, **Amorim JH**, Branquinho C, Fares S, Morelli F, Niinemets U, Paoletti E, Pinho P, Sgrigna G, Stojanovski V, Tiwary A, Laforzezza R, Calfapietra C (submitted) Towards an integrative approach to evaluate the environmental ecosystem services provided by urban forests. *Environmental Research*.

Baldacchini C, Castanheiro A, Maghakyan N, Sgrigna G, Verhelst J, Alonso R, **Amorim JH**, Bellan P, Djunisijevic Bojovic D, Breuste J, Bühler O, Cântar I, Cariñanos P, Carriero G, Churkina G, Dinca L, Esposito R, Gawronski S, Kern M, Le Thiec D, Moretti M, Ningal T, Rantzoudi E, Sinjur I, Stojanova B, Aničić Urošević M, Velikova V, Zivojinovic I, Sahakyan L, Calfapietra C, Samson R, 2017. How does the amount and composition of PM deposited on *Platanus acerifolia* leaves change across different cities in Europe?. *Environmental Science & Technology*.  
<http://dx.doi.org/10.1021/acs.est.6b04052>.

Grote R, Samson R, Alonso R, **Amorim JH**, Calfapietra C, Cariñanos P, Churkina G, Fares S, Le Thiec D, Niinemets Ü, Mikkelsen TN, Paoletti E, Tiwary A, 2016. Functional traits of urban trees in relation to their air pollution mitigation potential: A holistic discussion. *Frontiers in Ecology and the Environment* 14(10), 543–550. <http://dx.doi.org/10.1002/fee.1426>.

**Amorim J.H.**, Valente J., Cascão P., Ribeiro L.M., Viegas D.X., Ottmar R., Miranda A.I., 2016. Near-source grid-based measurement of CO and PM<sub>2.5</sub> concentration during a full-scale fire experiment in Southern European shrubland. *Atmospheric Environment* 145, 19–28.  
<http://dx.doi.org/10.1016/j.atmosenv.2016.09.017>.

Borrego C, **Amorim JH**, Tchepel O, Dias D, Rafael S, Sá E, Pimentel C, Fontes T, Fernandes P, Pereira SR, Bandeira JM, Coelho MC, 2016. Urban scale air quality modelling using detailed traffic emissions estimates. *Atmospheric Environment* 131, 341–351.  
<http://dx.doi.org/10.1016/j.atmosenv.2016.02.017>.

Silva F.C., Borrego C., Keizer J.J., **Amorim J.H.**, Verheijen F.G.A., 2015. Effect of moisture content on wind erosion thresholds of biochar. *Atmospheric Environment* 123, 121–128.  
<http://dx.doi.org/10.1016/j.atmosenv.2015.10.070>.

Borrego C., Coutinho M., Costa A.M., Ginja J., Ribeiro C., Monteiro A., Ribeiro I., Valente J., **Amorim J.H.**, Martins H., Lopes D., Miranda A.I., 2015. Challenges for a new Air Quality Directive: the role of monitoring and modelling techniques. *Urban Climate* 14(3), 328–341.  
<http://dx.doi.org/10.1016/j.uclim.2014.06.007>.

Valente J., **Amorim J.H.**, Teixeira R., Pimentel C., Ribeiro I., Borrego C., 2014. Children exposure to traffic-related pollution: assessment of a typical schoolday. *Int. J. Environment and Pollution* 55(1/2/3/4), 104–112. <http://dx.doi.org/10.1504/IJEP.2014.065910>.

Coelho M.C., Fontes T., Bandeira J., Pereira S., Tchepel O., Dias D., Sá E., **Amorim J.H.**, Borrego C., 2014. Assessment of potential improvements on regional air quality modelling related with implementation of a detailed methodology for traffic emissions estimation. *Science of the Total Environment* 470–471, 127–137. <http://dx.doi.org/10.1016/j.scitotenv.2013.09.042>.

**Amorim J.H.**, Valente J., Cascão P., Pimentel C., Miranda A.I., Borrego C., 2013. Pedestrian exposure to air pollution in cities: modelling the effect of roadside trees. *Advances in Meteorology*. Volume 2013, Article ID 964904. <http://dx.doi.org/10.1155/2013/964904>.

**Amorim J.H.**, Rodrigues V., Tavares R., Valente J., Borrego C., 2013. CFD modelling of the aerodynamic effect of trees on urban air pollution dispersion. *Science of the Total Environment* 461–462, 541–551. <http://dx.doi.org/10.1016/j.scitotenv.2013.05.031>.

Miranda A.I., Martins V., Cascão P., **Amorim J.H.**, Valente J., Borrego C., Ferreira A.J., Cordeiro C.R., Viegas D.X., Ottmar R., 2012. Wildland smoke exposure values and exhaled breath indicators on firefighters. *Journal of Toxicology and Environmental Health - Part A: Current Issues* 75 (13-15), 831–843. <http://dx.doi.org/10.1080/15287394.2012.690686>.

**Amorim J.H.**, 2011. Numerical modelling of the aerial drop of firefighting agents by fixed-wing aircraft – Part I: Model development. *International Journal of Wildland Fire (IJWF)* 20, 384–393. <http://dx.doi.org/10.1071/WF09122>.

**Amorim J.H.**, 2011. Numerical modelling of the aerial drop of firefighting agents by fixed-wing aircraft – Part II: Model validation. *International Journal of Wildland Fire (IJWF)* 20, 394–406. <http://dx.doi.org/10.1071/WF09123>.

Tente H., Gomes P., Ferreira F., **Amorim J.H.**, Cascão P., Miranda A.I., Nogueira L., Sousa S., 2011. Evaluating the efficiency of Diesel Particle Filters in high-duty vehicles: field operational testing in Portugal. *Atmospheric Environment* 45, 2623–2629. <http://dx.doi.org/10.1016/j.atmosenv.2011.02.069>.

Miranda A.I., Martins V., Cascão P., **Amorim J.H.**, Valente J., Tavares R., Borrego C., Tchepel O., Ferreira A.J., Cordeiro C.R., Viegas D.X., Ribeiro L.M., Pita L.P., 2010. Monitoring of firefighters exposure to smoke during fire experiments in Portugal. *Environment International* 36, 736–745. <http://dx.doi.org/10.1016/j.envint.2010.05.009>.

Martins A., Cerqueira M., Ferreira F., Borrego C., **Amorim J.H.**, 2009. Lisbon air quality - evaluating traffic hot-spots. *International Journal of Environment and Pollution (IJEP)* 39(3/4), 306–320. <http://dx.doi.org/10.1504/IJEP.2009.028693>.

Borrego C., Costa A.M., **Amorim J.H.**, Santos P., Sardo J., Lopes M., Miranda A.I., 2007. Air quality impact due to scrap-metal handling on a sea port: A wind tunnel experiment. *Atmospheric Environment* 41(30), 6396–6405. <http://dx.doi.org/10.1016/j.atmosenv.2007.01.022>.

Miranda A.I., Ferreira J., Valente J., Santos P., **Amorim J.H.**, Borrego C., 2005. Smoke measurements during Gestosa 2002 experimental field fires. *International Journal of Wildland Fire (IJWF)* 14(1), 107–116. <http://dx.doi.org/10.1071/WF04069>.

Borrego C., Tchepel O., Salmim L, **Amorim J.H.**, Costa A.M., Janko J., 2004. Integrated modelling of road traffic emissions: application to Lisbon air quality management. *Cybernetics and Systems: An International journal* 35(5-6), 535–548. <http://dx.doi.org/10.1080/0196972049051904>.

Borrego C., Tchepel O., Costa A.M., **Amorim J.H.**, Miranda A.I., 2003. Emission and dispersion modelling of Lisbon air quality at local scale. *Atmospheric Environment* 37(37), 5197–5205. <http://dx.doi.org/10.1016/j.atmosenv.2003.09.004>.

### Books and chapters in books

Tallis M.J., **Amorim J.H.**, Calfapietra C., Freer-Smith P., Grimmond S., Kotthaus S., Oliveira F.L., Miranda A.I., Toscano P., 2015. The impacts of green infrastructure on air quality and temperature. In "Handbook on Green Infrastructure: Planning, design and implementation".

Chapter 2. Sinnett D., Burgess S. and Smith N. (Eds.). Edward Elgar Publishing Limited, UK. ISBN 978-1-78347-399-1. 30-49. 474 p.

Azevedo P., Marques F., Fernandes J.M., **Amorim J.H.**, Valente J., Miranda A.I., Borrego C., Cunha J.P., 2014. A wearable technological solution for firefighters smoke exposure monitoring. In "Advances in Forest Fire Research". Chapter 5. D.X. Viegas (Ed.). Coimbra, Portugal. 1919p. [http://dx.doi.org/10.14195/978-989-26-0884-6\\_144](http://dx.doi.org/10.14195/978-989-26-0884-6_144). ISBN 978-989-26-0884-6.

Miranda A.I., **Amorim J.H.**, Valente J., Monteiro A., Ferreira J., Borrego C., 2014. Forest fires effects on the atmosphere: 20 years of research in Portugal. In "Advances in Forest Fire Research". Chapter 1. D.X. Viegas (Ed.). Coimbra, Portugal. 1919p. [http://dx.doi.org/10.14195/978-989-26-0884-6\\_30](http://dx.doi.org/10.14195/978-989-26-0884-6_30). ISBN 978-989-26-0884-6.

**Amorim J.H.**, Miranda A.I., Valente J., Oliveira F., Borrego C., Fernandes J.M., Ottmar R., Prichard S.J., Andreu A., Fernandes P., Cunha J.P., 2014. Fire safety management based on integrated monitoring and forecast of smoke exposure. In "Advances in Forest Fire Research". Chapter 5. D.X. Viegas (Ed.). Coimbra, Portugal. 1919p. [http://dx.doi.org/10.14195/978-989-26-0884-6\\_152](http://dx.doi.org/10.14195/978-989-26-0884-6_152). ISBN 978-989-26-0884-6.

**Amorim J.H.**, Miranda A.I., Valente J., Cascão P., Martins V., Ribeiro L.M., Viegas D.X., 2014. Sensor grid for fine particles monitoring during a fire: implications to firefighter's safety. In "Advances in Forest Fire Research". Chapter 5. D.X. Viegas (Ed.). Coimbra, Portugal. 1919p. [http://dx.doi.org/10.14195/978-989-26-0884-6\\_166](http://dx.doi.org/10.14195/978-989-26-0884-6_166). ISBN 978-989-26-0884-6.

Borrego C., Lopes M., Cascao P., **Amorim J.H.**, Martins H., Tavares R., Miranda A.I., Tallis M.J., Freer-Smith P.H., 2014. Urban Air Quality Models. In "Understanding Urban Metabolism: a Tool for Urban Planning". Chrysoulakis N., Castro E. and Moors E. (Eds.). Routledge, UK. pp. 79-90. ISBN: 978-0-415-83511-4.

Lopes M., Borrego C., Martins H., **Amorim J.H.**, 2014. Guidelines for Urban Sustainable Development. In "Understanding Urban Metabolism: a Tool for Urban Planning". Chrysoulakis N., Castro E. and Moors E. (Eds.). Routledge, UK. pp. 197-205. ISBN: 978-0-415-83511-4.

Ribeiro I., Valente J., **Amorim J.H.**, Monteiro A., Miranda A.I., Lopes M., Borrego C., 2014. Air quality modelling and its applications. In "Current Environmental Issues and Challenges. Cao, Giacomo and Orrù, Roberto (Eds.). Springer. pp 45-56. ISBN 978-94-017-8777-2.

Monteiro A., **Amorim J.H.**, Ferreira J., Sá M., Borrego C., 2014. Reducing Emissions of Atmospheric Pollutants. In "Global Environmental Change", Volume 1 of the series Handbook of Global Environmental Pollution. Freedman B. (Ed.). Springer Netherlands. pp 469-478. ISBN 978-94-007-5783-7.

Borrego C., **Amorim J.H.**, Tchepel O., Costa A.M., Miranda A.I., 2013. Air quality modelling at street-scale. In "Advanced Numerical Methods for Complex Environmental Models: Needs and Availability", chapter 5. István Faragó, Ágnes Havasi & Zahari Zlatev (Eds.). Bentham Science Publishers. pp. 327-364. ISBN: 978-1-60808-777-1.

**Amorim J.H.**, Valente J., Pimentel C., Cascão P., Rodrigues V., Miranda A.I., Borrego C., 2013. Modeling the role of urban green infrastructures on students' exposure to traffic-related air pollution. In "Recent Advances in Urban Planning and Construction". Lee K.C. (Ed.). WSEAS Press. ISBN: 978-960-474-352-0.

Borrego C., **Amorim J.H.**, Martins H., Valente J., 2013. Planeamento urbano, qualidade do ar e exposição humana. In "Europa 2020: retorica, discursos, política e prática". Carlos Rodrigues C., Moura e Sá F., Santinha G., Lourenço Marques J., Mota J.C., Viegas M. (Eds.). UA Editora, Aveiro, Portugal. 2<sup>nd</sup> Edition, July 2013. ISBN: 978-972-789-391-1.

**Amorim J.H.**, Valente J., Pimentel C., Miranda A.I., Borrego C., 2012. Detailed modelling of the wind comfort in a city avenue at the pedestrian level. In "Usage, Usability, and Utility of 3D City Models". T. Leduc, G. Moreau, R. Billen (Eds.). Edp Sciences, France: 03008p.1-03008p.6. ISBN: 978-2-7598-0798-7.

Valente J., **Amorim J.H.**, Cascão P., Rodrigues V., Borrego C., 2012. Children exposure to PM levels in a typical school morning. In "Usage, Usability, and Utility of 3D City Models". T. Leduc, G. Moreau, R. Billen (Eds.). Edp Sciences, France: 03009p.1-03009p.7. ISBN: 978-2-7598-0798-7.

**Amorim J.H.**, Valente J., Cascão P., Rodrigues V., Borrego C., 2012. Modelling the link between urban morphology, pedestrian dynamics and individual exposure to air pollution In: 3D Issues in Urban and Environmental Systems. R. Billen, M. Cagliioni, O. Marina, G. Rabino, R. San José (Eds.). Società Editrice Esculapio, Italy. 103-110 p. ISBN: 978-88-7488-546-6.

**Amorim J.H.**, Miranda A.I., Sá E., Martins V., Ribeiro C., Coutinho M., Borrego C., 2012. Multiscale modelling of forest fire smoke emissions impact on urban air quality at the pedestrian level. In: Modelling Fire Behaviour and Risk. D. Spano, V. Bacciu, M. Salis, C. Sirca. (Eds). University of Sassari; Euro-Mediterranean Center for Climate Changes (CMCC), Italy; 255-260 pp. ISBN: 978-88-904409-7-7.

Miranda A.I., **Amorim J.H.**, Martins V., Cascão P., Valente J., Ottmar R., Ribeiro L.M., Viegas D.X., Borrego C., 2012. Modelling the exposure of firefighters to smoke based on measured data. C.A. Brebbia and G. Perona (Eds.). In: Modelling, Monitoring and Management of Forest Fires III. WIT Transactions on Ecology and the Environment 158. WIT Press. Southampton, UK. 258 pp. ISBN: 978-1-84564-584-7. Cited by Scopus.

Borrego C., Valente J., **Amorim J.H.**, Rodrigues V., Cascão P., Miranda A.I., 2012. Modelling of tree-induced effects on pedestrian exposure to road traffic pollution. J.W.S. Longhurst and C.A. Brebbia (Ed.s). In: Urban Transport XVIII. WIT Transactions on Ecology and the Environment 128. WIT Press. Southampton, UK. 754 pp. ISBN: 978-1-84564-580-9. Cited by Scopus.

**Amorim J.H.**, Keizer J.J., Miranda A.I., Monaghan K. (Eds.), 2011. Forest fires research: beyond burnt area statistics. University of Aveiro, Aveiro, Portugal. ISBN 978-972-789-345-4. 78 p.

Miranda A.I., Borrego C., **Amorim J.H.**, Martins V., Martins H., Cascão P., Sá E., Carvalho A., Valente J., 2011. Forest Fires, Air Quality and Human Exposure. In "Forest fires research: beyond burnt area statistics". J.H. Amorim, J.J. Keizer, A.I. Miranda, K. Monaghan (Eds.). University of Aveiro, Aveiro, Portugal. ISBN 978-972-789-345-4. 33-38.

Borrego C., Cascão P., Lopes M., **Amorim J.H.**, Tavares R., Rodrigues V., Martins J., Miranda A.I., Chrysoulakis N., 2011. Impact of urban planning alternatives on air quality: URBAIR model application. C.A. Brebbia and J.W.S. Longhurst (Ed.s). In: Air Pollution XIX. WIT Transactions on Ecology and the Environment 147. 12. WIT Press. Southampton, UK. DOI: 10.2495/AIR110021. Cited by Scopus.

**Amorim J.H.**, Lopes M., Borrego C., Tavares R., Miranda A.I., 2010. Air quality modelling as a tool for sustainable urban traffic management. C.A. Brebbia and J.W.S Longhurst (Ed.s). In: Air Pollution XVIII. WIT Transactions on Ecology and the Environment, Vol 136, pp 3-14. WIT Press. Southampton, UK. doi: 10.2495/AIR100011. Cited by Scopus.

**Amorim J.H.**, Rodrigues V., Tavares R., Borrego C., 2010. CFD Modelling of Tree-induced Effects on Flow and Dispersion of Traffic Emissions in City Centres. Advances in Urban Rehabilitation and Sustainability. Panagopoulos T., Noronha T. and Beltrão J. (Eds.). Wseas Press, Faro, Portugal. ISBN: 978-960-474-244-8. 185 p.

Miranda A.I., Martins V., **Amorim J.H.**, Cascão P., Martins J., Borrego C. (Eds.), 2010. Exposição de bombeiros ao fumo e consequentes efeitos na saúde. Universidade de Aveiro. Aveiro. 77 p.

Miranda A.I., Borrego C., Martins H., Martins V., **Amorim J.H.**, Valente J., Carvalho A., 2009. Forest Fire Emissions and Air Pollution in Southern Europe. In: Earth Observation of Wildland Fires in Mediterranean Ecosystems. Ed. Chuvieco, Emílio, Springer Berlin Heidelberg. Chapter 12, pp. 171 – 187. ISBN: 978-3-642-01753-7. DOI: 10.1007/978-3-642-01754-4

Borrego C., Lopes M., Valente V., Neuparth N., Martins P., **Amorim J.H.**, Costa A.M., Silva J., Martins H., Tavares R., Nunes T., Miranda A.I., Cascão P., Ribeiro I., 2009. The importance of urban planning on air quality and human health. Chapter 2, Urban Planning in the 21st Century, Eds. D.S. Graber and K.A. Birmingham, Nova Science Publishers, Inc. pp. 27-49. ISBN: 978-1-60692-975-9.

Borrego C., Carvalho A., Miranda A.I., Costa A.M., Monteiro A., **Amorim J.H.**, Valente J., Lopes M., Neuparth N. (Eds.), 2009. Investigação em Ambiente e Saúde: desafios e estratégias. Universidade de Aveiro, Aveiro. ISBN: 978-972-789-288-4

Borrego C., Neuparth N., Carvalho A.C., Carvalho A., Miranda A.I., Costa A.M., Monteiro A., Martins H., Correia I., Ferreira J., **Amorim J.H.**, Rosado Pinto J., Santos J., Silva J.V., Valente J., Martins J., Simões L., Lopes M., Tchepel O., Cascão P., Lopes Da Mata P., Martins P., Santos P., Tavares R., Nunes T., Martins V., 2009. SaudAr: A Saúde e o Ar que Respiramos. In: *Investigação em Ambiente e Saúde: desafios e estratégias*. Borrego C.; Carvalho A.; Miranda A.I.; Costa A.M.; Monteiro A.; Amorim J.H.; Valente J.; Lopes M.; Neuparth N. (eds) Universidade de Aveiro. Aveiro. ISBN: 978-972-789-288-4

Miranda A.I., Borrego C., **Amorim J.H.**, Martins V., Martins H., Carvalho A., Silva J.V., Cascão P., Costa A.M., Monteiro A., Valente J., Santos P., 2008. Impacto dos Incêndios Florestais na Qualidade do Ar em Áreas Urbanas. Aveiro. Universidade de Aveiro. 74 pp.

Borrego C., Neuparth N., Carvalho A.C., Carvalho A., Miranda A.I., Costa A.M., Monteiro A., Martins H., Correia I., Ferreira J., **Amorim J.H.**, Martins J., Pinto J.R., Santos J., Silva J.V., Valente J., Simões L., Lopes M., Tchepel O., Cascão P., Lopes Da Mata P., Martins P., Santos P., Tavares R., Nunes T., Martins V., 2008. A Saúde e o Ar que Respiramos - Um Caso de Estudo em Portugal. *Textos de Educação*. Lisboa. Fundação Calouste Gulbenkian. 125 pp.

Borrego C., **Amorim J.H.**, 2007. Risk and Emergency Modelling for Environmental Security: General Aspects. In: *Air, Water and Soil Quality Modelling for Risk and Impact Assessment*. Adolf Ebel and Teimuraz Davitashvili (eds). NATO Security through Science Series – C: Environmental Security. Springer. Dordrecht; 365 p. Cited by Scopus.

Borrego C., Valente J., Santos J., **Amorim J.H.**, Lopes M., Neuparth N., Mata P., Santos P., Tavares R., Martins V., 2006. Uma Cidade Saudável para uma Vida Melhor. Projecto Saudar – A saúde e o ar que respiramos. University of Aveiro, Portugal; 53 p.

Monteiro A., Miranda A.I., Costa A.M., Borrego C., Martins H., Valente J., **Amorim J.H.**, Salmim L., Sousa M., Lopes M., Tchepel O., 2005. Transportes Sustentáveis para a Cidade do Futuro (Sustainable Transports for the City of Tomorrow). Miranda, A.I., Costa, A.M. e Borrego, C. (Eds). University of Aveiro, Portugal; 96 p.

## Thesis

**Amorim J.H.**, 2008. Numerical modelling of the aerial drop of products for forest firefighting. PhD Thesis. Department of Environment and Planning, University of Aveiro, Portugal. 190 p.

**Amorim J.H.**, 2003. Modelação do escoamento e da dispersão de poluentes atmosféricos em áreas urbanas (Modelling of flow and air pollutants dispersion in urban areas). Master Thesis. Department of Environment and Planning, University of Aveiro, Portugal. 130 p. In Portuguese.

## Oral presentations at international conferences

**Amorim J.H.**, 2016. Urban SIS: a climate service for European cities. Simpósio Internacional sobre Mudanças Climáticas – Saneamento e Biodiversidade. December 5-7, 2016. Curitiba, Brazil.

**Amorim J.H.**, Miranda A.I., Valente J., Oliveira F., Borrego C., Fernandes J.M., Ottmar R., Prichard S.J., Andreu A., Fernandes P., Cunha J.P., 2014. Fire safety management based on integrated monitoring and forecast of smoke exposure. VII International Conference on Forest Fire Research (ICFFR). November 17-20, 2014. Coimbra, Portugal.

**Amorim J.H.**, Miranda A.I., Valente J., Cascão P., Martins V., Ribeiro L.M., Viegas D.X., 2014. Sensor grid for fine particles monitoring during a fire: implications to firefighter's safety. VII International Conference on Forest Fire Research (ICFFR). November 17-20, 2014. Coimbra, Portugal.

**Amorim, J.H.**, Freitas, S., Moura E Sá, F., Valente, J., Miranda, A.I., Carvalho, J., Borrego, C., 2014. Pedestrian wind comfort modelling for different tree planting plans in a city avenue. 17<sup>th</sup> International Conference European Forum on Urban Forestry (EFUF 2014). June 3-7, 2014. Lausanne, Switzerland.

**Amorim J.H.**, Valente J., Pimentel C., Cascão P., Rodrigues V., Miranda A.I., Borrego C., 2013. Modeling the role of urban green infrastructures on students' exposure to traffic-related air pollution. 4<sup>th</sup> International Conference on Urban Sustainability, Cultural Sustainability, Green Development, Green Structures and Clean Cars (USCUDAR13). December 10-12, 2013. Budapest, Hungary.

**Amorim J.H.**, Valente J., Pimentel C., Miranda A.I., Borrego C., 2012. Detailed modelling of the wind comfort in a city avenue at the pedestrian level. International Conference on Usage, Usability, and Utility of 3D City Models (3u3D). 29-31 October 2012. Nantes, France.

**Amorim J.H.**, Valente J., Cascão P., Rodrigues V., Borrego C., 2012. Modelling the link between urban morphology, pedestrian dynamics and individual exposure to air pollution. International Workshop on 3D Issues in Environmental and Urban Systems. 12-13 April, 2012. Madrid, Spain.

**Amorim J.H.**, Miranda A.I., Sá E., Martins V., Ribeiro C., Coutinho M., Borrego C., 2011. Multiscale modelling of forest fire smoke emissions impact on urban air quality at the pedestrian level. International Conference on Fire Behaviour and Risk (ICFBR) 2011. 4-6 October 2011. Alghero, Sardinia, Italy.

**Amorim J.H.**, Becker R., Carvalho A., Suter A., Lovellette G., Borrego C., 2010. Optimized aerial firefighting based on statistical modelling of computed drop effectiveness. VI International Conference on Forest Fire Research (ICFFR). November 15-18, 2010. Coimbra, Portugal.

**Amorim J.H.**, Rodrigues V., Tavares R., Borrego C., 2010. CFD Modelling of Tree-induced Effects on Flow and Dispersion of Traffic Emissions in City Centres. 3<sup>rd</sup> WSEAS International Conference on Urban Rehabilitation and Sustainability (URES '10). November 3-5, 2010. Faro, Portugal.

**Amorim J.H.**, Rodrigues V., Borrego C., Costa A.M., 2010. A CFD analysis of the vegetative canopy effect on urban air pollutants dispersion. International Conference on Local Air Quality and its Interaction with Vegetation. January 21-22, 2010. Antwerp, Belgium.

**Amorim J.H.**, Borrego C., Miranda A.I., 2009. Development and validation of an operational numerical model for the simulation of the aerial drop of firefighting products. Eighth Symposium on Fire and Forest Meteorology. 13-15 October 2009. Kalispell, Montana, USA.

**Amorim J.H.**, Borrego C., Miranda A.I., 2008. An operational dropping model towards an efficient aerial firefighting. International Conference on Forest Fires 2008. 17-19 September 2008. Toledo, Spain.

**Amorim J.H.**, Miranda A.I., Borrego C., 2005. The effect of vegetative canopy on urban air pollutants dispersion: an application to Lisbon city centre. 14<sup>th</sup> International Symposium on Transport and Air Pollution (TAP). 1-3 June 2005. Graz, Austria.

#### **Oral communications as invited speaker**

"Um mergulho virtual no ar da cidade: do conforto à exposição humana". "Ciclo de Palestras em Toxicologia e Ecotoxicologia" - TOXECO 2014. Aveiro, Portugal. May 21, 2014.

"Análisis de dispersión de los contaminantes a nivel de corredores y del Valle de Aburrá". Workshop on "Desarrollo de una Estrategia Ambiental Integrada para una Movilidad Sustentable en el Área Metropolitana del Valle de Aburrá". Medellín, Colombia. March 26, 2014.

"Modelación de calidad del aire a microescala". Workshop on "Desarrollo de una Estrategia Ambiental Integrada para una Movilidad Sustentable en el Área Metropolitana del Valle de Aburrá". Medellín, Colombia. March 27, 2014.

"Human comfort and exposure to air pollution under climate change: the role of computational models". Seminar on "Horizon 2020 - Fighting and Adapting to Climate Change". Aveiro, Portugal. Jan. 22, 2014.

"Estado del arte y recomendaciones para la modelación de la calidad del aire de intervenciones de transporte". Workshop on "Aplicación de Estrategias Ambientales Integradas del Plan del Sistema Integrado de Transporte Público de Bogotá". Bogotá, Colombia. Nov. 28 - 29, 2011.

"An overview of fire and emissions research in Portugal". Seminar at the University of Washington, USA. Oct. 20, 2010.

"An overview of fire and emissions research in Portugal". Seminar at the Pacific Wildland Fire Sciences Laboratory, Seattle, USA. Oct. 19, 2010.

"Numerical modelling of the interaction between urban vegetation and air pollutants dispersion". Workshop on "Biosphere-Atmosphere Interaction in a Changing Environment: from Local to Global Scale". Univ. Aveiro, Sep. 20, 2010.

"The problem of forest fires on urban air quality". Conference on "Civil Protection and the Environment". Escola Superior de Tecnologia e Gestão de Leiria, Dec. 10, 2008.