Curriculum Vitae of
Diogo Neves

PERSONAL INFORMATION

Full Name	Diogo Rúben Castelo Branco das Neves
National Identity Card	11921641
Birth Place and Date	Lisbon 03.08.1981
Address	Rua Duarte Galvão, nº6, 7º Esq, Lisboa
	1500 - 254 LISBOA
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Driving license	European category B

ACADEMIC DEGREES

- **2007** **GEOPHYSICAL SCIENCES COURSE SPECIALISATION IN METEOROLOGY AND OCEANOGRAPHY**
  (5 years) (300 European credits)

Institution	Faculty of Sciences – University of Lisbon, Portugal
Thesis	*"Modelação matemática da hidrodinâmica em zonas costeiras"*. *Mathematical modelling of the hydrodynamics at coastal zones* (in Portuguese). See publications [T1]
Final Grade	Degree: 13.2 out of 20.0
	Thesis: 18.0 out of 20.0

- **2009** **MASTER IN GEOPHYSICAL SCIENCES**

Institution	Faculty of Sciences – University of Lisbon, Portugal
Thesis	*"Utilização de um sistema de informação geográfica para a modelação numérica em zonas portuárias"*. *Utilization of a geographical information system for the numerical wave modelling in harbour areas* (in Portuguese). See publications [T2]
Final Grade	Degree: 17.0 out of 20.0
	Thesis: 17.0 out of 20.0

ADITIONAL TRAINING

- **2006/01 – 2006/06** Erasmus Student

Institution	Catholic University of Louvain la Neuve, Cyclotron, Louvain-la-Neuve, Belgium

- **2006/09 – 2007/09** Research Trainee
  Mathematical Modelling in Hydrodynamics at: (i) the Ocean Region of the Iberian Peninsula; (ii) River Douro Estuary and salinity intrusion modelling.

  [T1] see publications

	Institution	Department of Civil Engineering - University of Minho , Braga, Portugal

- 2008/10   Maritime Hydraulics Course
  Maritime Hydraulics: Numerical and physical Modelling.

  Institution   National Laboratory of Civil Engineering (LNEC), Lisbon, Portugal

- 2009/03   GIS Course
  Production and exploitation of geographical information: Numerical cartography, remote detection and GPS

  Institution   National Laboratory of Civil Engineering (LNEC) , Lisbon, Portugal

- 2012/09   Physical Modelling Course
  Institution   National Laboratory of Civil Engineering (LNEC) , Lisbon, Portugal

- 2014/07   Computational Fluid Dinamics Course (36h)
  Institution   National Laboratory of Civil Engineering (LNEC) , Lisbon, Portugal

- 2015/06   Linux for cluster users
  Intitution   National Laboratory of Civil Engineering (LNEC) , Lisbon, Portugal

- 2015/07   1st Portuguese meeting of OpenFOAM users
  Institution   University of Minho (UMINHO), Guimarães, Portugal

- 2015/07   Summer School in "Measuring techniques for turbulent open-channel flows"
  Institution   University of Lisbon – Instituto Superior Técnico, Lisbon. Portugal

- 2015/09   OpenFOAM Workshop
  Institution   National Laboratory of Civil Engineering (LNEC) , Lisbon, Portugal

CURRENT POSITION

- Since 2014/05   PhD Research Grant Holder

  Doctoral Program H2DOC - Air entrainment in wave breaking: experimental analysis and numerical modeling

  Contract SFRH / BD /52483/2014; Funded by the Portuguese Science and Technology Foundation (FCT)

  Institution   Instituto Superior Técnico da Universidade de Lisboa (IST – UL) Department of Hydraulics and Environment of the National Laboratory of Civil Engineering (LNEC), Lisbon, Portugal

PREVIOUS POSITIONS

- 2008/01 – 2008/04   Research Grant Holder

  Ocean Wave Energy and Primary Production at Portuguese Waters

  Contract PDCT/MAR/61463/2004; Funded by the Portuguese Science and Technology Foundation (FCT)

  Institution   Department of Civil Engineering - University of Minho, Braga, Portugal

- 2008/04 – 2008/08   Research Grant Holder

  Impact study of a fluvial park in the river Cávado hidrodynamics for flood conditions in the city of Barcelos, Portugal; Funded by the University of Minho (Portugal)

  Institution   Department of Civil Engineering - University of Minho, Braga, Portugal

- 2008/09 – 2011/12   Research Grant Holder

  GUIOMAR – Geographical interface for Coastal and marine modeling

  Contract PTDC/AMB/67450/2006; Funded by the Portuguese Science and Technology Foundation (FCT)

  Institution   Department of Hydraulics and Environment of the National Laboratory of Civil Engineering (LNEC), Lisbon, Portugal

- 2012/01 – 2014/04   Research Grant Holder

  SPACE – A Smoothed Particle Hydrodynamic model development and validation for Coastal Engineering applications

  Contract PTDC/ECM/114109/2009; Funded by the Portuguese Science and Technology Foundation (FCT)

  Institution   Department of Hydraulics and Environment of the National Laboratory of Civil Engineering (LNEC), Lisbon, Portugal

PROFESSIONAL EXPERIENCE

R & DT Projects

- 2007   Ocean Wave Energy and Primary Production at Portuguese Waters

  Contract PDCT/MAR/61463/2004; Funded by the Portuguese Science and Technology Foundation (FCT). See publications [J1] [C1-C2] [C9].

  Project objectives:
  - To analyze remote sensing data (Satellite data);
  - To assess the sea state influence regarding the primary production cycle;
  - To build a mathematical model for the primary production.

  My activities on the project:
  - Collect remote sensing data (Satellite data);
  - To analyze remote sensing data (Satellite data);
  - To assess the sea state influence regarding the primary production cycle;
  - To build a mathematical model for the primary production.

- 2008   Impact study of a fluvial park in the river Cávado hydrodynamics for flood conditions in the city of Barcelos, Portugal; Funded by the University of Minho (Portugal)

  Project objectives:
  - Analysis and evaluation of the river conditions due to the fluvial park;
  - To build an hydrodynamic 2D finite element model;
  - To execute flood simulations to analyze the fluvial park impact in flood conditions.

  My activities on the project:
  - Collect bathymetric information about the fluvial park in city of Barcelos and information about the flood conditions of the Cávado river;
  - Analysis and evaluation of the river conditions due to the fluvial park;
  - To build an hydrodynamic 2D finite element model;
  - To execute flood simulations to analyze the fluvial park impact in flood conditions;

- 2008   GUIOMAR – Geographical interface for Coastal and marine modeling
  Contract PTDC/AMB/67450/2006; Funded by the Portuguese Science and Technology Foundation (FCT). See publications [T2] [J2-J6] [C3-C8] [C10-C15] [C19] [P1-P2] [P5] [R5].

  Project objectives:
  - To build a graphical user interface in a GIS environment for Coastal and Marine modeling using VBA (visual Basic for applications) programming language;
  - To build a supported decision system based on GIS.

  My activities on the project:
  - To build a graphical user interface in a GIS environment for Coastal and Marine modeling using VBA (visual Basic for applications) programming language;
  - To build a supported decision system based on GIS;
  - Too build a risk assessment tool for port navigation and coastal structures for extreme wave conditions;
  - To perform study cases to test the GUIOMAR system.

- 2009   MICORE – Morphological Impacts and Coastal Risks Induced By Extreme Storm Events
  Funded by the FP7 Framework programme

  Project objectives:
  - To develop a probabilistic mapping of the morphological impact of marine storms;
  - To produce early warning and information systems to support long-term disaster reduction.

  My activities on the project:
  - To participate on field campaigns and analyze field data.

- 2009   MADYCOS – Multidisciplinary Integrated Analysis of the Sediment Dynamics and Fecal Contamination in Intermittent Coastal Systems

    Contract PTDC/ECM/66484/2006; Funded by the Portuguese Science and Technology Foundation (FCT)

    Project objectives:
    - To improve current understanding of the hydrodynamics, morphodynamics and potential for fecal contamination of intermitent coastal streams.

    My activities on the project:
    - To participate on field campaigns and analyze field data.

- 2010   BRISA – Breaking Waves and Induced Sand Transports

    Contract PTDC/MAR/65585/2006; Funded by the Portuguese Science and Technology Foundation (FCT). See publications [C16-C18] [P3-P4] [R1-R4].

    Project objectives:
    - To study the breaking wave phenomena and its influence in the sediment transport in coastal areas.

    My activities on the project:
    - To participate on field campaigns and analyze field data.
    - To perform physical modeling on a wave channel
    - To study wave breaking on a wave channel
    - To Improve physical modelling techniques on a wave channel

- 2010   DETI – Dynamics of ephemeral tidal inlets

    Contract PTDC/ECM/67411/2006; Funded by the Portuguese Science and Technology Foundation (FCT). See publications [R6].

    Project objectives:
    - To study the Dynamics of ephemeral tidal inlets

    My activities on the project:
    - To participate on field campaigns and analyze field data.

- 2012   EROS – Erosion of Rocky Shores – differences in protection promoted by sandy beaches and shore platforms.

    Contract PTDC/CTE-GIX/111230/2009; Funded by the Portuguese Science and Technology Foundation (FCT).

    Project objectives:
    - To study the Dynamics of sandy beaches and shore platforms

    My activities on the project:
    - To participate on field campaigns and analyze field data.

- 2012   SPACE – A Smoothed Particle Hydrodynamic model development and validation for Coastal Engineering applications

Contract PTDC/ECM/114109/2009; Funded by the Portuguese Science and Technology Foundation (FCT). See publications.

Project objectives:
- Set of results from physical model, including overtopping discharge
- Create a User-friendly interface for SPHysics model
- Set of results from the field work, including bathymetry, waves, run-up and overtopping on a porous coastal structure
- Improvement of the actual version of the SPHysics model

My activities on the project:
- Physical modeling.
- Create a User-friendly interface for SPHysics model.
- Participate in the field campaigns.
- Improvement of the SPHysics model for coastal structures

- 2012   HIDRALERTA – *"Sistema de previsão e alerta de inundações em zonas costeiras e portuárias"*– Alert and prediction system for flooding events on coastal areas.

Contract PTDC/AAC-AMB/120702/2010; Funded by the Portuguese Science and Technology Foundation (FCT).

Project objectives:
- To build an alert system for flooding events on coastal areas

My activities on the project:
- To participate on field campaigns and analyze field data.

Field Campaigns

- 2009/02   Sines Port, Sines, Portugal
Measurements: Waves (H,T,DIR)
Project GUIOMAR

- 2009/03   Faro Beach, Faro, Portugal
Measurements: Waves (H,T,DIR), Currents, Sediment transport (sediment traps)
Projects BRISA and MICORE

- 2009/05   Amoreira Beach, Aljezur, Portugal (1)
Measurements: Waves (H,T,DIR), Currents, Sediment transport (sediment traps), Water quality
Project MADYCOS

- 2009/09   Amoreira Beach, Aljezur, Portugal (2)
Measurements: Waves (H,T,DIR), Currents, Sediment transport (sediment traps), Water quality
Project MADYCOS

- 2010/04   Lagoa de Albufeira Beach, Sesimbra, Portugal
Measurements: Waves (H,T,DIR), Currents, Sediment transport (sediment traps), Water quality
Project DETI

- 2010/05   Costa de Caparica Beach, Costa de Caparica, Portugal
  Measurements: Waves (H,T,DIR), Currents, Sediment transport (sediment traps)
  Project BRISA

- 2011/02   Sines Port, Sines, Portugal
  Measurements: Waves (H,T,DIR)
  Project GUIOMAR

- 2012/03   Galé Beach, Albufeira, Portugal
  Measurements: Waves (H,T,DIR)
  Project EROS

- 2012/09   Costa da caparica, Portugal
  Measurements: Waves (H,T,DIR)
  Project HIDRALERTA

Academic Supervision

- 2010/09   Eng. Ricardo Saiote (research trainee)
  1 month co-orientation working on a physical model (wave channel) for wave breaking studies, LNEC.

- 2010/10   Eng. Rui Reis (research trainee)
  1 month co-orientation working on a physical model (wave channel) for wave breaking studies, LNEC.

- 2010/10   Eng. Marta Santos (research trainee)
  1 month co-orientation working on a physical model (wave channel) for wave breaking studies, LNEC.

- 2010/11   Eng. Ricardo Jonatas (research trainee)
  1 month co-orientation working on a physical model (wave channel) for wave breaking studies, LNEC.

- 2015/09   Eng. António Ribeiro Pires
  Master Thesis "Velocity field modeling for free surface wave propagation" (In Portuguese), IST-UL / LNEC

Talks

- 2013/12   Sines Port, Sines, Portugal
  - Establishment wave regimes within ports
  - Application of the GUIOMAR System to the Port of Sines
  Project GUIOMAR

- 2015/09   LNEC, Lisbon, Portugal
  - 1st H2Doc Workshop "Air Entrainment in wave breaking experimental and numerical modeling"

Conference Organization

- 2012/03   Jornadas de Investigação e Inovação LNEC (Workshops on Research and Innovation of LNEC (National Laboratory of Civil Engineering)
  LNEC, Lisbon, Portugal

Workshop Organization

- 2011/02   The GUIOMAR Project (Risk Assessment for port navigation)
  Sines Port, Sines, Portugal

COMPUTING SKILLS

Competent with Microsoft software, UNIX and LINUX systems
- Experienced with FORTRAN, VISUAL BASIC, LABVIEW, C++, JAVA and MATLAB programming languages
- Experienced with the OpenFoam, SPHysics, DualSPHysics, RMA2, RMA4, RMA10, SWAN, Bouss-2D and DREAMS mathematical models
- Competent with environmental modelling software (TECPLOT, SMS, SURFER, GRAPHER, etc...)
- Competent with GIS environment and CAD features (ARCGIS, GEOMEDIA, AUTOCAD, etc...)

OTHER SKILLS

- Very experienced with oral presentations
- Experienced with physical wave propagation models (1D, 2D)
- Experienced with computational models (1D, 2D, and 3D) for waves, hydrodynamics, and sediment transport
- Competent with physical, mathematical modelling, and remote detection concepts
- Experienced with remote detection devices
- Experienced with field work on wave and current measurements in Harbours and Beaches
- Experienced with risk assessment concepts
- Experienced in the development of user interfaces for numerical models

LANGUAGES

MOTHER TONGUE   ***PORTUGUESE***

OTHER LANGUAGES

	Reading	Writing	Verbal
English	Very Good	Very Good	Very Good
French	Good	Good	Good
Spanish	Good	Average	Good

INTERESTS

- Science in general
- Part-time musician
- Sports: Bodyboard, surf, swimming and football
- Cinema, Music, Literature

[T1] **Theses**

Neves, D.R.C.B. (2007). *"Modelação matemática da hidrodinâmica em zonas costeiras* *Mathematical modelling of the hydrodynamics at coastal zones* (In Portugues Graduation thesis in Oceanography. Faculty of Sciences of the University of Lisbon, Lisbo September 2007.

[T2] Neves, D.R.C.B. (2009). *"Utilização de um sistema de informação geográfica para modelação numérica em zonas portuárias."* *"Utilization of a geographical informati system for the numerical wave modelling in harbour areas* (In Portuguese). Master the in Geophysical Sciences/Oceanography. Faculty of Sciences of the University of Lisbo Lisbon, December 2009.

(http://repositorio.ul.pt/bitstream/10451/3564/1/ulfc055741_%20Diogo_Neves.pdf)

Papers in Magazines and Journals

[J1] Neves, D.R.C.B; Pinho, J.L.S; Vieira, J.M.P. (2008). *"Análise de dados de satél adequados à caracterização da produção primária na superfície oceânica da Z Portuguesa."* *Satellite data analysis for the characterization of the ocean surfo primary production on the Portuguese exclusive economical zone* (in Portuguese). Journ "Engenharia Civil" – Department of Civil Engineering of the University of Minho, Vol. 3 December, pp. 125-138. Edition DEC-UM (ISSN 0873-1152)

(http://www.civil.uminho.pt/revista/n33/Artigo10-Pag125-138.pdf)

[J2] Neves, D.R.C.B.; Zózimo, A.C.; Pinheiro, L.V.; Fortes, C.J.E.M. (2009). *GUIOMA Geo(graphical) User Interface for cOastal and MARine Modeling. Supported Decisi System*. Journal of Coastal Research, SI 56 (Proc. 10th International Coastal Symposiun pp.1542–1546, ISSN 0749-0258.

(http://e-geo.fcsh.unl.pt/ICS2009/_docs/ICS2009_Volume_II/ 1542.1546_D.Neves_ICS2009.pdf). (ISI Paper)

[J3] Neves, D.R.C.B.; Rodrigues, S.; Reis, M.T.; Fortes, C.J.E.M.; Santos, J.A.; Capitão, (2010). *Application to the port of Sines of a new tool for risk assessment in po navigation*. Journal of Coastal Conservation, 16:489 – 501.

DOI:10.1007/s11852-012-0190-7

(http://link.springer.com/article/10.1007/s11852-012-0190-7?null#page-1). (ISI Paper

[J4] Santos, J.A.; Rodrigues S.; Pinheiro, L.V.; Neves, D.R.C.B.; Fortes, C.J.E.M.; Reis, M.T Simões, A.; Azevedo E.B. (2010). *Managing wave-induced risks in port operations* Journal of Coastal Conservation, (Proc. International Conference on Coastal Conservati and Management) ISSN: 1400-0350 – in press. (ISI Paper)

[J5] Neves, D.R.C.B.; Rodrigues, S.; Reis, M.T.; Fortes, C.J.E.M.; Santos, J.A. (201 *"Aplicação ao porto de Sines de uma nova metodologia de avaliação do risco par navegação portuária utilizando o sistema de informação geográfica GUIOMA Application to the port of Sines of a new tool for risk assessment in port navigation usi the GIS GUIOMAR system*. (in Portuguese) Journal of Integrated Coastal Zone Managemen Vol. 10(4), pp. 483-504.

(http://www.aprh.pt/rgci/rgci232.html).

[J6]   Neves, D.R.C.B; Fortes, C.J.E.M.; Santos, J.A.; Reis, M.T.; Rodrigues; S. (201(
        "Avaliação do risco para a navegação utilizando o sistema GUIOMAR. O caso do porto
        Sines. ". Risk assessment in port navigation using the GUIOMAR system. Port of Sir
        study case. (in Portuguese). Territorium journal, nº18 (pp. 89-98).
        Associação Portuguesa de Riscos, Prevenção e Segurança.
        (http://www.uc.pt/fluc/nicif/riscos/Documentacao/Territorium/T18_artg/
        Diogo_Ruben_Neves.pdf).

[J7]   Neves D. R.C.B.; Endres L.A.M.; Fortes C.J.E.M.; Okamoto T. (2012) *"Direction*
        Spreading Model in a Wave Channel. Wave Propagation and Wave Breaking." Oce
        Engineering Journal, Elsevier, 55, 148–160.
        (http://dx.doi.org/10.1016/j.oceaneng.2012.07.016). (ISI Paper)

[J8]   Neves, D.R.C.B.; Santos, J.A.; Reis, M.T.; Fortes, C.J.E.M.; Simões A.; Azevedo E.I
        Rodrigues M.C. (2012). *"Metodologia de avaliação do risco associado ao galgamento*
        estruturas marítimas. Aplicação ao porto e à baía da Praia da Vitória, Açores, Portuga
        Risk assessment methodology for the overtopping of maritime structures. application
        the port and bay of Praia da Vitória, Azores, Portugal. Revista Gestão Costeira Integrad
        (in Portuguese) Journal of Integrated Coastal Zone Management, 12(3):291-312 (20
        ISSN 1646-8872. DOI:10.5894/rgci322
        (http://www.aprh.pt/rgci/rgci322.html).

[J9]   Rocha, T.; Fortes, C.; Reis, M.T.; Santos, J.A.; Neves, D.R.C.B.; Portela, L.; Pinto, F
        (2013). *"Avaliação comparativa do risco de galgamentos na Praia da Vitória, Terceir*
        Açores". Comparative assessment for the overtopping risk in the port of Praia da Vitór
        Terçeira, Azores. Revista VETOR - Revista de Ciências Exatas e Engenharias, V. 23, n. 1,
        104-120. (ISSN: 0102-7352)
        (http://www.seer.furg.br/vetor/article/view/3696)

[J10]   Didier, E., Neves, D.R.C.B., Martins, R., Neves, M.G. (2012). *"Modelling of*
        impermeable breakwater: comparison between physical and SPH numerical modeling
        Engenharia Térmica (Thermal Engineering), Vol. 11 • No. 1-2 • June and December 201,
        p. 68-76
        (http://demec.ufpr.br/reterm/ed_ant/19/artigos/257-2012.pdf)

[J11]   Conde, J.M.P, Reis R., Fortes, C.J.E.M., Neves, D.R.C.B. (2012). *"Wave propagation ir*
        wave channel, physical modelling". Engenharia Térmica (Thermal Engineering), Vol. 11
        No. 1-2 • June and December 2012 • p. 22-29
        (http://demec.ufpr.br/reterm/artigos/256-2012.pdf)

[J12]   Didier E.; Neves D.R.C.B.; Martins R.; Neves, M.G. (2013) *"Wave Interaction with*
        Vertical Breakwater: SPH Numerical and Experimental Modeling." Ocean Engineeri
        Journal, Elsevier, 88, p. 330-341.
        (http://dx.doi.org/10.1016/j.oceaneng.2014.06.029). (ISI Paper)

[J13]   Didier E.; Neves D.R.C.B.; Teixeira, P.R.F.; Neves, M.G. (2013) *"Application of*
        Smoothed Particle Hydrodynamics Numerical Model to a Water Chamber: Resoluti
        Refinement Technique Analysis and Comparison with a RANS Model." Internation
        Journal of Offshore and Polar Engineering, IJOPE (ISSN 1053-5381), International Society
        Offshore and Polar Engineers.
        (Submitted – Waiting response). (ISI Paper)

[J14]   Didier E.; Rodrigues A.; Neves M.G.;<u>Neves D.R.C.B.</u>; Dias J. (2015) *"Força de impacto n[...]
        quebra-mar vertical: comparação entre um modelo numérico SPH e formulaç[...]
        empiricas." Impact force on a vertical breakwater: Comparison between empiri[...]
        models and an SPH numerical model* (in Portuguese). Revista IBEROAMERICANA [...]
        Ingeniería Mecànica, Vol 19 N°2; p. 3-26, (ISSN 1137-2729). UNED (Universid[...]
        Nacional de Educación a Distancia).

[J15]   Santos, F.L.; Reis, M.T.; Fortes, C.J.E.M.; Lotufo, A.D.; <u>Neves, D.R.C.B.;</u> Poseiro, [...]
        Maciel, G.F. (2016). *"Performance of a Fuzzy Artmap Artificial Neural Network [...]
        Characterizing Sines Port Wave Regime (Portugal)".* Accepted,To be published [...]
        Journal of Coastal Research.

Papers to Conferences

[C1]   <u>Neves, D.R.C.B.;</u> Pinho, J.L.S; Vieira, J.M.P. (2007). *"Hidrodinâmica da zona oceân[...]
        adjacente à Península Ibérica." Hydrodynamics at the Ocean Region of Iberi[...]
        Peninsula* (in Portuguese). CMNE 2007 - Congress on Numerical Methods in Engineerin[...]
        Faculty of Engineering of the University of Porto, Porto, June 2007.

[C2]   <u>Neves, D.R.C.B.</u>; Pinho, J.L.S; Vieira, J.M.P. (2008). *"Modelação matemática [...]
        hidrodinâmica e da intrusão salina no estuário do rio Douro." Mathematical modelling [...]
        hydrodynamics and salt water intrusion at River Douro Estuary* (in Portuguese). [...]
        Congresso da água; APRH – Associação Portuguesa de Recursos Hídricos, APRH, Casca[...]
        April 2008.

[C3]   Zózimo, A.C.; <u>Neves, D.R.C.B.;</u> Fortes, C.J. (2008). *Guiomar: Geographical User Interfa[...]
        For Coastal And Marine Modeling, Recent Developments And Assessment Of Potent[...]
        Geographical Errors*. PIANC Mediterranean Days in Palermo, Italy – 1st Edition, Octob[...]
        7-9.

[C4]   <u>Neves, D.R.C.B.,</u> Zózimo, A.C.; Pinheiro, L.V.; Fortes, C.J. (2008). *GUIOMA[...]
        Geo(graphical) User Interface for cOastal and MARine Modeling. Supported Decisi[...]
        System*. International Coastal Symposium, Faculty of Social and Human Sciences of Lisbo[...]
        Lisbon, April 2009.

[C5]   <u>Neves, D.R.C.B.,</u> Zózimo, A.C.; Pinheiro, L.V.; Fortes, C.J. (2009). *"GUIOMA[...]
        desenvolvimentos recentes e aplicação ao caso de Sines." GUIOMAR: Rece[...]
        developments and the Sines port study case. (coupling of SWAN and DREAMS wa[...]
        numerical models in the GUIOMAR system)* (in Portuguese). 6as Jornadas portuguesas [...]
        engenharia costeia e portuária (JPECP). Funchal, October 2009.

[C6]   Raposeiro, P.D.; Reis, M.T.; <u>Neves. D.R.C.B</u>; Ferreira. J.C. (2009). *"Metodologia [...]
        cálculo do espraiamento e inundação em zonas costeiras recorrendo ao sisteima GUIOMA[...]
        aplicação à praia de Vale do Lobo." Methodology for the Run-up and flooding in coas[...]
        zones with the GUIOMAR system, Vale do Lobo case study* (in Portuguese). 6as Jorna[...]
        portuguesas de engenharia costeia e portuária (JPECP). Funchal, October 2009.

[C7]   <u>Neves, D.R.C.B.;</u> Fortes, C.J.E.M.; Reis, M.T.; Santos, J.A., Rodrigues S., Raposeiro P.[...]
        (2010). *"Avaliação do risco para a navegação em zonas portuárias utilizando o sistema [...]
        informação geográfica GUIOMAR. O caso de Sines." Risk assessment for shipping po[...]
        Using the GUIOMAR geographical information system. Sines study case* (in Portugues[...]
        MyESIG2010, Associação portuguesa de utilizadores de sistemas de informação geográf[...]
        (USIG). Oeiras, February 2010.

[C8]   Raposeiro P.D.; Fortes, C.J.E.M.; Reis, M.T.; Ferreira J.C.; <u>Neves, D.R.C.B.</u> (2010). *"Avaliação do Risco de Inundação na Praia de Vale do Lobo." Risk assessment for floodi* *events in the Vale do Lobo beach.* (in Portuguese). MyESIG2010, Associação portuguesa utilizadores de sistemas de informação geográfica (USIG). Oeiras, February 2010.

[C9]   <u>Neves, D.R.C.B.</u>, Zózimo, A.C., Fortes, C.J.E.M., Pinheiro, L.V., Capitão, R. (2010 *"Desenvolvimentos recentes do sistema GUIOMAR. Aplicação ao Caso de Sines." Rece* *developments of the GUIOMAR system. Sines harbour study case* (in Portuguese). Congresso da água; APRH – Associação portuguesa de recursos hídricos. Alvor, March 201

[C10]   Pinho, J.L.S.; Vieira, J.M.P.; <u>Neves, D.R.C.B.</u> (2010). *"Efeito das obras da embocadura hidrodinâmica, intrusão salina e dinâmica sedimentar do estuário do rio Douro." T* *impact of the new mouth configuration in the hidrodynamics, saline intrusion a* *sedimentary dynamics of the estuary of the Douro River.* (in Portuguese). 10° Congresso água; APRH – Associação portuguesa de recursos hídricos. Alvor, March 2010.

[C11]   <u>Neves, D.R.C.B.</u>; Rodrigues S.; Fortes, C.J.E.M.; Reis, M.T.; Santos, J.A.; Capitão (2010). *"New tools for risk assessment in port navigation: The Port of Sines."* ICCCM1 International Conference on Coastal Conservation and Management, Cascais, April 201

[C12]   Santos, J.A.; Rodrigues S.; Pinheiro, L.V.; <u>Neves, D.R.C.B.</u>; Fortes, C.J.E.M.; Reis, M.' Simões, A.; Azevedo E.B. (2010). "Managing Wave-Induced risks in port operation ICCCM10 – International Conference on Coastal Conservation and Management, Casca April 2010.

[C13]   <u>Neves. D.R.C.B.</u>; Santos, J.A.; Fortes, C.J.E.M.; Reis, M.T.; Rodrigues S.; Simões Azevedo E.B. (2010). *"Avaliação do risco para a navegação em dois portos portugueses Risk assessment for the navigation in two Portuguese ports* (in Portuguese). (SEMENG 2010), Federal University of Rio Grande – FURG, Rio Grande, Rio Grande do Sul, Braz November 2010

[C14]   <u>Neves, D.R.C.B.</u>; Rodrigues, S.; Vieira A.S.; Santos, J.A.; Fortes, C.J.E.M.; Reis, M.' Simões A.; Azevedo E.B. (2011). *"Avaliação do risco para a navegação em zor portuárias. Avanços na constituição de um sistema de suporte à decisão." Risk assessme for the port navigation. Latest advances towards a supported decision system* Portuguese). Congresso para planeamento e gestão de zonas costeiras CPGZC2011, Ca Verde, April 2011.

[C15]   Reis, M.T.; Fortes, C.J.E.M.; <u>Neves, D.R.C.B.</u>; Rodrigues, S.; Santos, J.A.; Vieira A. Simões A., Azevedo E.B. (2011). *"Previsão dos galgamento na baía da Praia da Vitória pa avaliação de risco e alerta." Overtopping Forecast for the risk assessment and alert in t Praia da Vitória Bay* (in Portuguese). Congresso para planeamento e gestão de zor costeiras CPGZC2011, Cabo Verde, April 2011.

[C16]   Santos, J.A.; Rodrigues, S.; <u>Neves, D.R.C.B.</u>; Vieira, A.; Fortes, C.J.E.M.; Reis, M.' Simões, A.; Azevedo E.B. (2011). *"MOIA: an integrated decision support tool for po management".* The 8th International Conference on Information Systems for Cri Response and Management – ISCRAM 2011, Lisbon, May 2011.

[C17]   Endres, L.; <u>Neves, D.R.C.B.</u>; Didier, E.; Fortes, C.J.E.M.; Okamoto T. (2011). *"Avaliaç do desempenho de modelos numéricos na simulação de ondas ao longo de um canal ondas" Numerical modelling assessment for the numerical wave simulation on a wa channel* (In Portuguese). Congress of numerical methods in engineering, CMNE201 Coimbra, Portugal, June 2011.

[C18]   Neves, D.R.C.B.; Fortes, C.J.; Endres, L.; Okamoto T. (2011). *"Modelação física*
propagação e rebentação de ondas num canal." Physical modelling of the wave breaki
and propagation in a wave channel (in Portuguese*)*. 7ᵃˢ Jornadas portuguesas
engenharia costeia e portuária (JPECP). FEUP - Porto, October 2011.

[C19]   Fortes, C.J.; Ferreira, Ó.; Silva, P.; Sancho, F.; Neves, D. R. C. B.; Rocha, M.; Moura,
Pinheiro, L.; Capitão, R.; Didier, E.; Neves, M.G.; Bezerra, M.M.; Abreu, T. (201
"Rebentação das ondas e o transporte de sedimentos. O Projecto BRISA." Wave Breaki
and the sediment transport. Project BRISA (in Portuguese). 7ᵃˢ Jornadas portuguesas
engenharia costeia e portuária (JPECP). FEUP - Porto, October 2011.

[C20]   Santos, J.A.; Reis, M.T.; Neves, D.R.C.B.; Fortes, C.J.E.M.; Rodrigues, S.; Azevedo, E.
Simões, A.; Ramalleira, J.; Raposeiro, P. (2011). *"Aplicação de uma metodologia pari*
avaliação do risco para a navegação e galgamento para o porto de Praia da Vitóri
Application of a new risk assessment methodology for port navigation and overtopping
the port of Praia da Vitória (in Portuguese). 7ᵃˢ Jornadas portuguesas de engenha
costeia e portuária (JPECP). FEUP - Porto, October 2011.

[C21]   Rodrigues, S.; Santos, J.A.; Neves, D.R.C.B.; Oliveira, R. (2011). *"Movimentos de navios*
entrada de um porto induzidos pela agitação marítima." Wave Induced Ship movemer
at the port entrance (in Portuguese). 7ᵃˢ Jornadas portuguesas de engenharia costeia
portuária (JPECP). FEUP - Porto, October 2011.

[C22]   Neves, D.R.C.B., Reis, M.T., Fortes, C.J.E.M., Santos, J.A. (2012). *"Avaliação do risco*
galgamento no posto 2 do molhe oeste do porto de Sines." Overtopping risk assessment
the south jetty post 2 of the Sines port (in Portuguese). 11° Congresso da água; APRI
Associação portuguesa de recursos hídricos. Porto, February, 2012.

[C23]   Neves, D.R.C.B.; Endres, L.; Fortes, C.J.E.M.; Okamoto T. (2012). *"Physical modelling*
wave propagation and wave breaking in a wave channel". Proceedings of the 5thSCA
International Short Conference on applied coastal research, Aachen.

[C24]   Neves, D.R.C.B.; Didier, E.; Reis, M.T.; Neves M.G. (2012). *"Overtopping of a pori*
structure using a Smoothed Particle Hydrodynamics Numerical Model". Coastlab1
Ghent, Belgium

[C25]   Conde, J.M.P.; Fortes, C.J.E.M.; Didier, E.; Neves, D.R.C.B (2012). *"A contribution to t*
study of wave propagation and wave breaking: Physical and numerical modeling
Coastlab12, Ghent, Belgium

[C26]   Reis, M.T.; Fortes, C.J.E.M.; Neves, D.R.C.B; Santos, J.A.;. (2012). "Avaliação
probabilidade de galgamentos não admissíveis no posto 2 do terminal de graneis líquic
do porto de Sines". probability assessment on non-admissible Overtopping events
terminal 2. (in Portuguese). 7° Encontro Nacional de Riscos, 19 e 20 de Abril, ISCIA, Ave

[C27]   Conde, J.M.P.; Fortes, C.J.E.M.; Didier, E.; Neves, D.R.C.B (2012). *" Propagação de onc*
ao longo de um canal inclinado sem rebentação: Estudo numérico e experimental". Wa
propagation in a wave flume without wave breaking: numerical and experimental study
Portuguese). 4ª Conferência Nacional em Mecânica de Fluidos, Termodinâmica e Energ
28 e 29 de Maio, Lisboa

[C28]   Fortes, C.J.E.M.; Didier, E.; Neves, D.R.C.B; P. Teixeira; L. Endres (2012). *"Desempen*
dos modelos numéricos COULWAVE e FLUENT na simulação de ondas ao longo de um car
de ondas". Performance of the numerical models COULWAVE and FLUENT in the wa
simulation in a wave channel (in Portuguese). 4ª Conferência Nacional em Mecânica
Fluidos, Termodinâmica e Energia, 28 e 29 de Maio, Lisboa

[C29]   Didier, E.; Martins R.; Neves M.G.; Neves, D.R.C.B. (2012). "*Interacção entre uma on[...]* *regular e um quebra-mar misto: Validação de um modelo numérico SPH com resulta[...]* *experimentais*". Wave interaction with a mix breakwater. SPH numerical model validati[...] with experimental data. 4ª Conferência Nacional em Mecânica de Fluidos, Termodinâmi[...] e Energia, 28 e 29 de Maio, Lisboa

[C30]   Rocha, T.; Fortes, C.; Reis, M.T.; Santos, J.A.; Neves, D.R.C.B.; Portela, L.; Pinto, F[...] (2012). "*Avaliação comparativa do risco de galgamentos na Praia da Vitória, Tercei[...]* *Açores*". Comparative assessment for the overtopping risk in the port of Praia da Vitor[...] Terçeira, Azores. Proc. V SEMENGO, Seminário e Workshop em Engenharia Oceânica, 7 a[...] de Novembro, Rio Grande, Brasil.

[C31]   Didier, E., Neves, D.R.C.B., Martins, R., Neves, M.G. (2012). "*Modelação de u[...]* *quebra-mar de talude impermeável: comparação entre modelo numérico SPH e mode[...]* *físico*". Modelling of an impermeable breakwater: camparison between a SPH numeri[...] model and the physical modelling (in Portuguese). Proc. V Seminário e Workshop e[...] Engenharia Oceânica – V SEMENGO, ISBN 978-85-7566-236-7, 7 a 9 de Novembro, [...] Grande, RS-Brasil, pp. 71-83.

[C32]   Conde, J.M.P, Reis R., Fortes, C.J.E.M., Neves, D.R.C.B. (2012). "*Modelação Física [...]* *Propagação de Ondas em um Canal*". Wave propagation in a wave channel, physi[...] modelling. Proc. V SEMENGO, Seminário e Workshop em Engenharia Oceânica, 7 a 9 [...] Novembro, Rio Grande, Brasil.

[C33]   Rocha, T.; Fortes, C.; Santos, J.A.; Reis, M.T.; Neves, D.R.C.B.; Pinto, F.T. (201[...] "*Influência da Variação do Nível de Maré na Avaliação do Risco de Galgamentos na Baía [...]* *Praia da Vitória, Terceira, Açores*". The influence of tidal level variation on overtoppi[...] risk evaluation at Praia da Vitória bay, Terceira Azores (in Portuguese). 8ªs Jornadas [...] Hidráulica, recursos hídricos e Ambiente, FEUP, 30 de Outubro, Porto, Portugal.

[C34]   Ferreira, Ó.; Reis, M.T.; Carrasco, A.R.; Neves, M.G.; Neves, D.R.C.B.; Didier, E. (201[...] "*Small Overtopping Albufeira Harbour Field Measurements and Modelling*". Proceedin[...] of the 6thSCACR International Short Conference on applied coastal research, June, Lisb[...] Portugal.

[C35]   Didier, E.; Neves, D.R.C.B.; Teixeira, P.R.T.; Neves, M.G.; Soares, H. and Viegas, [...] (2013). "*Coupling of FLUINCO Mesh Based and SPH Mesh Free Numerical Codes for t[...]* *Modelling of Wave Overtopping Over a Porous Breakwater*". Proceedings of the 6thSCA[...] International Short Conference on applied coastal research, June, Lisbon, Portugal.

[C36]   Neves, D.R.C.B.; Didier, E.; Teixeira, P.R.T. and Neves, M.G. (2013). "*Resoluti[...]* *Refinement Technique in a Smoothed Particle Hydrodynamics Numerical Flume [...]* *Coastal Engineering Applications*". Proceedings of the MARINE 2013; V Internation[...] Conference on Computational Methods in Marine Engineering, May, Hamburg, Germany[...]

[C37]   Neves, D.R.C.B.; Didier, E.; Neves M.G. (2013). "*Aplicação do modelo SPHyCE a estrutu[...]* *porosas: Quebra-mar Oeste do Porto de Albufeira*". Application of SPHyCE model [...] *porous Structures: West breakwater of Albufeira Port* (in Portuguese). 8as Jorna[...] portuguesas de engenharia costeira e portuária (JPECP). LNEC - Lisbon, October 2013.

[C38]   Dias, J.; Didier, E.; Neves, D.R.C.B.; Neves M.G. (2013). "*Modelação numérica à escala [...]* *protótipo de um quebra-mar de talude com o código SPHyCE*". Numerical modeling w[...] *SPHyCE model at prototype scale for a breakwater* (in Portuguese). 8as Jorna[...] portuguesas de engenharia costeira e portuária (JPECP). LNEC - Lisbon, October 2013.

[C39]   Didier, E.; Rodrigues A.; Neves M.G.; <u>Neves, D.R.C.B.;</u> (2013). *"Forças de impacto nu quebra-mar misto obtidas com um modelo numérico SPH e formulações empíricas Impact forces on a mixed breakwater with an SPH numerical modeland with empiric formulations* (in Portuguese). 8ᵃˢ Jornadas portuguesas de engenharia costeira e portuá (JPECP). LNEC - Lisbon, October 2013.

[C40]   Eric Didier, <u>Neves, D.R.C.B.</u>, Paulo Teixeira, João Dias and Maria Graça Neves; (201 *"SPH numerical and physical modeling of wave overtopping a porous breakwater"*. 3 IAHR Europe Congress, Porto, Portugal, April 2014

[C41]   F.L. Santos, <u>Neves, D.R.C.B</u>, Maria Teresa Reis, Conceição Juana Fortes, Pedro Posei A.D. Lotufo and G.F. Maciel; (2014). *"Definition of Sines port wave regime using artmap artificial neural network with fuzzy logic"*. 3rd IAHR Europe Congress, Por Portugal, April 2014.

[C42]   Conceição J.E.M. Fortes, Eric Didier, <u>Neves, D.R.C.B.</u>, Roger M. Moreira, José M.P. Conc Rita Carvalho, Julio T.A. Chacaltana; (2014). *"Avaliação do desempenho de mode numéricos na simulação de elevação de superfície livre e velocidade ao longo de u canal sujeito a uma onda regular com rebentação"*. Numerical modelling assessme in the free surface elevation for wave breaking in a wave flume (in Portuguese). MEFTE - Conferência Nacional em Mecânica de Fluidos, Termodinâmica e Energ September, Porto.

[C43]   Eric Didier, <u>Neves, D.R.C.B.</u>, Paulo R.F. Teixeira, Joao Dias and Maria Graça Neves (201 *"Estudo de convergência com a resolução de um modelo SPH na interacção entre u onda regular incidente e um quebra-mar poroso"*. Resolution convergence study of SPH model for the interaction between an incident regular wave and a parc breakwater Portuguese). 5ª MEFTE - Conferência Nacional em Mecânica de Fluido Termodinâmica e Energia, September, Porto.

[C44]   <u>Neves, D.R.C.B.</u> (2015). *"SPH modelling for air entrainment in wave breaking"*. 2ⁿᵈ Iberi SPH Workshop, UVigo, December, Ourense.

Posters

[P1]   Zózimo, A.C.; <u>Neves, D.R.C.B.</u>; Fortes, C.J.E.M.; Gonçalves A. (2009). *"GUIOMA Geographical User Interface for cOastal and MARine modeling. Avaliação potenciais erros geográficos."* GUIOMAR: Geographical User Interface for cOastal a MARine modeling. Assessment of the potentional geographical errors (In Portugues ESRI Portugal, 7ᵗʰ meeting of the ESRI users, Lisbon, March 2009.

[P2]   <u>Neves, D.R.C.B.</u>; Rodrigues, S.; Fortes, C.J.E.M.; Reis, M.T.; Santos, J.A.; Zózimo, A. Gonçalves A. (2010). *"GUIOMAR: Geographical User Interface for cOastal and MARi modeling. Sistema de apoio à decisão. Caso de Sines."* GUIOMAR: Geographical U Interface for cOastal and MARine modeling. Supported decision system. Sines study ca (In Portuguese). ESRI Portugal, 8ᵗʰ meeting of the ESRI users, Lisbon, March 2010.

[P3]   <u>Neves, D.R.C.B.</u>; Endres, L.; Fortes, C.J.E.M.; Okamoto T. (2011). *"Physical modelling wave propagation and wave breaking in a wave channel"*. 5ᵗʰSCACR International Sh Conference on applied coastal research, Aachen, June 2011.

[P4]   Raposeiro, P.; Reis, M. T.; Fortes, C.J.E.M.; Santos, J. A.; Vieira, A.; <u>Neves, D.R.C.</u> Azevedo, E. B.; Simões, A.; Ferreira, J. C. (2011). *"Physical modelling of wa propagation and wave breaking in a wave channel"*. 5ᵗʰSCACR International Sh Conference on applied coastal research, Aachen, June 2011.

[P5]   Neves, D.R.C.B.; (2015). *"Air Entrainment in wave breaking: experimental analysis a* *numerical modelling".* Phd Opendays, Lisbon, November 2015.

Technical Reports

[R1]   Neves, D.R.C.B.; Endres L.; Fortes, C.J.E.M.; Pinheiro, L.V.; Okamoto T. *"Ensaios* *modelo físico" Physical modelling experiments* (in Portuguese) BRISA Project Repo LNEC, Lisbon, October 2010.

[R2]   Neves, D.R.C.B.; Endres L.; Fortes, C.J.E.M.; Okamoto T. *"Metodologias de análise* *ensaios em modelo físico" Metothology for data analysis from the physical experimer* (in Portuguese) BRISA Project Report. LNEC, Lisbon, November 2010.

[R3]   Neves, D.R.C.B.; Endres L.; Fortes, C.J.E.M.; Okamoto T. *"Rebentação das ondas. Anál* *e tratamento de dados obtidos em ensaios em modelo físico" Wave breaking. Physi* *experiment data analysis* (in Portuguese) BRISA Project Report. LNEC, Lisbon, Decemb 2010.

[R4]   Lemos R.; Neves, D.R.C.B.; Endres L.; Fortes, C.J.E.M.; Capitão R.; Okamoto T. *"Geraç* *de agitação irregular no canal COI3" Irregular wave generation in the COI3 Flume* (Portuguese) BRISA Project Report. LNEC, Lisbon, February 2011.

[R5]   Capitão R.; Fortes, C.J.E.M.; Neves, D.R.C.B. *"Relatório da Campanha GUIOMAR II* *Porto de Sines" GUIOMAR II - port of Sines Campaign Report* (in Portuguese) GUIOM Project Report. LNEC, Lisbon, April 2011.

[R6]   Capitão R.; Fortes, C.J.E.M.; Neves, D.R.C.B. *"Relatório da Campanha à Lagoa* *Albufeira" Lagoa de Albufeira Campaign Report* (in Portuguese) DETI Project Repo LNEC, Lisbon, June 2011.