

João Pedro Martins

## CURRICULUM VITÆ

Coimbra, October 2018

## 1. Personal data

Full name	João Pedro Simões Cândido Martins
Birthday	1984.03.19
Birthplace	Coimbra, Portugal
Institutional address	Departamento de Engenharia Civil, Universidade de Coimbra (Pólo II), Rua Luís Reis Santos, 3030-788 Coimbra, Portugal
Telephone	+351 239 797 259
E-mail	<a href="mailto:jpmartins@uc.pt">jpmartins@uc.pt</a>

## 2. Academic qualifications

Ph.D.	Steel and Composite Construction in 2014. Civil Engineering Department, Faculty of Science and Technology, University of Coimbra.  Grade: Approved with Distinction and Honours
Diploma of Advanced Specialization	Steel and Composite Construction in 2011. Civil Engineering Department, Faculty of Science and Technology, University of Coimbra.  Grade: 16 / 20
M.Sc. <sup>1</sup>	Civil Engineering with Specialization in Structural Mechanics in 2009. Civil Engineering Department, Faculty of Science and Technology, University of Coimbra.  Grade: 16 / 20
B.Sc. <sup>1</sup>	Civil Engineering in 2008. Civil Engineering Department, Faculty of Science and Technology, University of Coimbra.  Grade: 14 / 20

## 3. Additional Training

Continuous Professional Development	<p><i>MatchID Digital Image Correlation course</i>. MatchID in 2017.</p> <p><i>Cable Supported Bridges</i> (Pontes de Tirantes). Civil Engineering Department, Instituto Superior Técnico, University of Lisbon (FUNDEC) in 2013.</p> <p>ABAQUS FEA. Civil Engineering Department, University of Coimbra (ACIV) em 2011.</p> <p>Wind Towers: Technological Features – Design by Finite Element Method. Civil Engineering Department, University of Coimbra &amp; Portuguese Steelwork Association in 2011.</p> <p>SAP2000. Civil Engineering Department, University of Coimbra (ACIV) in 2008.</p> <p>Robot Millennium. Civil Engineering Department, University of Coimbra (ACIV) in 2008.</p>
-------------------------------------	---

---

<sup>1</sup>Within the Integrated Master in Civil Engineering in accordance to the Bologna Process.

Languages	<p>German language and culture level 3 and 4 (Língua e Cultura Alemãs III e IV), European level A2. Language Center, Faculty of Arts and Humanities, University of Coimbra in 2012 and 2013.</p> <p>Grade 18 / 20 (level 3) &amp; 16 / 20 (level 4)</p> <p>German language and culture level 1 and 2 (Língua e Cultura Alemãs I e II), European level A1. Language Center, Faculty of Arts and Humanities, University of Coimbra in 2011 and 2012.</p> <p>Grade: 15 / 20 (level 1) &amp; 18 / 20 (level 2)</p> <p>Advanced Communication Skills in English I. Language Center, Faculty of Arts and Humanities, University of Coimbra in 2012.</p> <p>Grade: 16 / 20</p> <p>Post-intermediate English Course level 1 and 2 (Inglês do Quotidiano Pós-Intermédio I e II), European level B2. Language Center, Faculty of Arts and Humanities, University of Coimbra in 2011 and 2012.</p> <p>Grade: 17 / 20 (level 1) &amp; 18 / 20 (level 2)</p>
-----------	---

#### 4. Professional & Scientific Associations

##### 4.1 Portuguese

Portuguese Institute for Quality (IPQ)	Member of CT 115/SC3 (Portuguese Normalisation Technical Commission: Structural Euro-codes/Sub commission 3 – Eurocode 3-1-5: Plated Structural Elements) since 2016.
Portuguese Association of Structural Engineers (APEE)	Member since 2016.
Portuguese Steelwork Association (CMM)	Member since 2010.
Portuguese Engineering Association (OE)	<p>Effective member since 2009.</p> <p>Senior member since 2016</p> <p>Qualified Engineer with level E3 in 2015</p> <p>Qualified Engineer with level E2 in 2009</p>

##### 4.2 International

European Convention for Constructional Steelwork (ECCS)	<p>Member of the Technical Working Group 8.3 (TWG 8.3) – Plate Buckling since 2017.</p> <p>Proxy Member (representing Professor Luís Simões da Silva) of the Technical Working Group 8.3 (TWG 8.3) – Plate Buckling from 2012 to 2016.</p>
---	--

#### 5. Grants & Awards

Portuguese Foundation for Science and Technology	Individual Early Researcher Grant from 2010 to 2014.
--	--

- Elsevier *Certificate of Outstanding Contribution in Reviewing*, em reconhecimento das revisões efetuadas para a qualidade da revista, Thin-Walled Structures (junho, 2018).
- Certificate of Recognized Reviewer*, em reconhecimento das revisões efetuadas para a revista, Thin-Walled Structures (abril, 2018).
- Certificate of Outstanding Contribution in Reviewing*, em reconhecimento das revisões efetuadas para a qualidade da revista, Journal of Constructional Steel Research (fevereiro, 2018).
- Certificate of Recognized Reviewer*, em reconhecimento das revisões efetuadas para a revista, Journal of Constructional Steel Research (março, 2017).
- Certificate of Outstanding Contribution in Reviewing*, em reconhecimento das revisões efetuadas para a qualidade da revista, Engineering Structures (outubro, 2016).
- Certificate of Recognized Reviewer* em reconhecimento das revisões efetuadas para a revista, Engineering Structures (junho, 2016).

## 6. Professional Career

### 6.1 In Academia

- University of Coimbra Visiting Assistant Researcher at the Civil Engineering Department, Faculty of Science and Technology, since 2017.
- Visiting Assistant Professor at the Civil Engineering Department (Structural Mechanics area) Faculty of Science and Technology, from 2015 to 2017.
- Visiting Lecturer at the Civil Engineering Department (Structural Mechanics area) Faculty of Science and Technology, from 2013 to 2015.
- ISPTEC Visiting Professor at the Department of Engineering and Technology in 2015 under the protocol between ISPTEC and the University of Coimbra.
- University of Ljubljana Invited Researcher at the Faculty of Civil and Geodetic Engineering (Chair for Metal Structures), University of Ljubljana in 2013 (under the supervision of Professor Darko Beg).
- ISISE Full member since 2015.
- Ph.D. student from 2009 to 2014.

### 6.2 In Industry

- Matereospace Non-executive consultant of Structural Engineering since 2015.
- Tetraplano Engenharia Structural Engineer from 2009 to 2010.
- Trainee in Structural Engineering from 2008 to 2009.

## 7. Academic & Scientific activity

### 7.1 Teaching

Teaching	<b>Integrated Master in Civil Engineering, Civil Engineering Department, Faculty of Science and Technology, University of Coimbra.</b>
	<p>Steel Structures (2015-16, 2016-17)</p> <p>Strength of Materials I (2014-15, 2016-17)</p>
	<b>Master in Steel and Composite Construction Civil Engineering Department, Faculty of Science and Technology, University of Coimbra.</b>
	<p>Bridges II (2017-18<sup>3</sup>)</p> <p>Conceptual Design of Bridges (2017-18<sup>3</sup>)</p> <p>Design of Steel Structures by FEM (2016-17<sup>2</sup>)</p> <p>Steel Structures for Offshore and Renewable Energy Systems (2015-16<sup>3</sup>)</p> <p>Design of Bridges (2015-16<sup>3</sup>)</p> <p>Design of Offshore structures (2013-14, 2014-15)</p>
	<b>Doctoral Programme in Steel and Composite Construction Civil Engineering Department, Faculty of Science and Technology, University of Coimbra.</b>
	<p>Bridges II (2017-18<sup>3</sup>)</p> <p>Conceptual Design of Bridges (2017-18<sup>3</sup>)</p> <p>Design of Buildings I (2016-17)</p> <p>Steel Structures for Offshore and Renewable Energy Systems (2015-16, 2016-17)</p> <p>Design of Bridges (2015-16, 2016-17<sup>2</sup>)</p> <p>Design of Offshore structures (2013-14, 2014-15)</p>
	<b>European Erasmus Mundus Master SUSCOS (Sustainable Constructions under Natural Hazards and Catastrophic Events).</b>
	<p>Conceptual Design of Bridges (2015-16)</p>
	<b>Licenciatura (5 years) in Civil Engineering, Department of Engineering and Technology, Instituto Superior Politécnico de Tecnologias e Ciências de Luanda.</b>
	<p>Steel Structures (2015)</p> <p>Concrete Structures (2015)</p>
Training	<p>Lecturer/ Trainer at the 5<sup>th</sup> edition of the Training course on Design of Offshore Structures, Portuguese Steelwork Association and Civil Engineering Department, Faculty of Science and Technology, University of Coimbra de 15 to 18 May, 2018, Coimbra.</p> <p>Lecturer/ Trainer at the 4<sup>th</sup> edition of the Training course on Design of Offshore Structures, Portuguese Steelwork Association and Civil Engineering Department, Faculty of Science and Technology, University of Coimbra de 16 to 19 May, 2017, Coimbra.</p> <p>Lecturer/ Trainer at the 3<sup>rd</sup> edition of the Training course on Design of Offshore Structures, Portuguese Steelwork Association and Civil Engineering Department, Faculty of Science and Technology, University of Coimbra de 10 to 13 May, 2016, Coimbra.</p>

<sup>2</sup> Responsible for the edition.

<sup>3</sup> The course was held simultaneously with the Doctoral Programme in Steel and Composite Construction.

Lecturer/ Trainer at the 2<sup>nd</sup> edition of the Training course on Design of Offshore Structures, Portuguese Steelwork Association and Civil Engineering Department, Faculty of Science and Technology, University of Coimbra de 5 to 8 May, 2016, Coimbra.

Lecturer/ Trainer at the 1<sup>st</sup> edition of the Training course on Design of Offshore Structures, Portuguese Steelwork Association and Civil Engineering Department, Faculty of Science and Technology, University of Coimbra de 9, 10, 16 and 17 May, 2016, Coimbra.

## 7.2 Academic & Scientific Management activities

University of Coimbra	Ph.D. Student's Representative at the Pedagogic Board of the Faculty of Science and Technology from 2011 to 2015.
	Master Student's Representative at the Civil Engineering Department Management Board from 2004 to 2006.
ISISE	Scientific coordinator of the research project <i>Curved thin panels for structural application – ULTIMATEPANEL</i> (PTDC/ECM-EST/1494/2014), from 2016 to 2019.
	Team manager of the research project <i>Optimal and aesthetic design of curved steel bridges – OUTBURST</i> (RFCS-2015-709782), from 2016 to 2019.
DEC-FCTUC/ACIV	Team manager for software development under a contract grant with ArcelorMittal, from 2017 to 2018.

## 7.3 Supervision of Academic & Scientific works

Ph.D. Thesis	Filip Ljubinković (conclusion foreseen for 2019), "Optimization of bridge superstructures using curved shaped plated elements: aesthetics and structural concepts". Ph.D. Thesis in Steel and Composite Construction, University of Coimbra.
	Grade: -
	Tiago Manco (conclusion foreseen for 2018), "Behaviour of steel members subjected to hazardous loading in support offshore structures". Ph.D. Thesis in Steel and Composite Construction, University of Coimbra.
	Grade: -
Project of Thesis	Filip Ljubinković (2017), "Optimization of bridge superstructures using curved shaped plated elements: aesthetics and structural concepts". Project of Thesis in Steel and Composite Construction, University of Coimbra.
	Grade: 18 / 20
	Tiago Manco (2015), "Behaviour of steel members subjected to hazardous loading in support offshore structures". Project of Thesis in Steel and Composite Construction, University of Coimbra.
	Grade: 17 / 20
Master Thesis	Aline Correia (conclusion foreseen for 2019), "Influence of the cross-section shape in the dynamic behaviour of long span steel bridges". Tese de Mestrado em Construção Metálica e Mista, Universidade de Coimbra.
	Grade: -

Ana Azevedo (conclusion foreseen for 2019), “Structural Design of Shell Structures for Off-shore Applications”. Tese de Mestrado em Construção Metálica e Mista, Universidade de Coimbra.

Grade: -

Frutuoso Oliveira (conclusion foreseen for 2018), Tese de Mestrado Integrado em Engenharia Civil na especialidade em Mecânica Estrutural, Universidade de Coimbra.

Grade: -

Miguel Correia (conclusion foreseen for 2018), “Robustness, redundancy and progressive collapse of offshore jacket structures”. Master Thesis in Steel and Composite Construction, University of Coimbra.

Grade: -

Adriana Lopes (conclusion foreseen for 2018), “Comportamento de elementos tubulares de estruturas *offshore* sujeitas a colisão”. Master Thesis in Civil Engineering (Specialisation in Structural Mechanics), University of Coimbra.

Grade: -

Maria do Rosário Silva (2017), “Método de dimensionamento de colunas estaiadas”. Master Thesis in Civil Engineering (Specialisation in Structural Mechanics), University of Coimbra.

Grade: 16 / 20

Manuel Amorim (2017), “Análise de estabilidade de pórticos de um pavilhão industrial: Método Geral do Eurocódigo 3 vs. Método dos Elementos Finitos”. Master Thesis in Civil Engineering (Specialisation in Structural Mechanics), University of Coimbra

Grade: 14 / 20

Rui Leite (2016), “Dimensionamento de Pórticos de Pavilhões Industriais Recorrendo a Métodos de Cálculo Avançado”. Master Thesis in Civil Engineering (Specialisation in Structural Mechanics), University of Coimbra.

Grade: 14 / 20

Vasco Silva (2016), “Estudo de Alternativas de Reforço Estrutural da Ponte de Arcos da Portela”. Master Thesis in Civil Engineering (Specialisation in Structural Mechanics), University of Coimbra.

Grade: 15 / 20

Katarzyna Brodowska (2016), “The use of modern design tools in BIM technology. Conceptual design of Community Centre in Rzeszów”. Master Thesis in Civil Engineering (Specialisation in Structural Mechanics), University of Coimbra.

Grade: 12 / 20

Anita Gumiel (2016), “Construction design of Hotel with Spa using BIM technology”. Master Thesis in Civil Engineering (Specialisation in Structural Mechanics), University of Coimbra.

Grade: 13 / 20

João Rodrigues (2016), “Caracterização experimental de elementos em aço com secção variável”. Master Thesis in Civil Engineering (Specialisation in Structural Mechanics), University of Coimbra.

Grade: 17 / 20

Lucas Ferreira (2015), “Comportamento dinâmico de plataformas *offshore*”. Master Thesis in Civil Engineering (Specialisation in Structural Mechanics) University of Coimbra.

Grade: 15 / 20

Tiago Manco (2014), “Avaliação comparativa da regulamentação para estruturas *offshore* (API, ISO, NORSOK e EC3)”. Master Thesis in Civil Engineering (Specialisation in Structural Mechanics), University of Coimbra.

Grade: 18 / 20

#### 7.4 Involvement in Research Projects

Portuguese Foundation for Science and Technology (FCT)	Generalisation on the use of structural adhesives in steel bridges – ADHESIVESTEEL (SAICT/2017/031545), 2018-2021.
	Principal Researcher
	Curved thin panels for structural application – ULTIMATEPANEL (PTDC/ECM-EST/1494/2014), 2016-2019.
Centro 2020	Principal Researcher
	Stability design of non-uniform steel elements – TAPERSTEEL (PTDC/ECM-EST/1970/2012), 2013-2015.
	Researcher
Research Fund for Coal and Steel (European Commission)	Sustainable Built Environment under Natural Hazards and Extreme Events – SUSpENse (CENTRO-01-0145-FEDER-000006)
	Assistant Researcher
	Optimal and aesthetic design of curved steel bridges – OUTBURST (RFCS-2015-709782), 2016-2019.
	Researcher
	High Strength Steel for Long Span Structures – HILONG (RFSR-CT-2012-00028), 2012-2015.
	Researcher

#### 7.5 Participation in evaluation boards of academic works

Project of Thesis	Alberto Simões (2016), “Sistema inovador para revestimento de edifícios em estrutura metálica”. Project of Thesis in Steel and Composite Construction, University of Coimbra.
	Examiner
	Tiago Manco (2015), “Behaviour of steel members subjected to hazardous loading in support offshore structures”. Project of Thesis in Steel and Composite Construction, University of Coimbra.
	Advisor



Master Thesis    Aníbal Lousã (2018), “Veículos autónomos e conectados – tecnologia e identificação de possíveis alterações na infraestrutura de transporte”. Master Thesis in Civil Engineering (Specialisation in Transports and Urban Planning), University of Coimbra.

President

João Alves (2018), “Interoperabilidade BIM em projeto de estruturas”, Master Thesis in Civil Engineering (Specialisation in Structural Mechanics), University of Coimbra.

Examiner

Filipe Rocha (2017), “Finite Element Analysis of light weight shear wall steel panels”, Master Thesis in Civil Engineering (Specialisation in Structural Mechanics), University of Coimbra.

Examiner

Maria do Rosário Silva (2017), “Análise numérica de colunas estaiadas”. Master Thesis in Civil Engineering (Specialisation in Structural Mechanics), University of Coimbra.

Advisor

Filipe Simões (2017), “Three-dimensional macro-modelling of RHS column-to-beam joints”, Master Thesis in Civil Engineering (Specialisation in Structural Mechanics), University of Coimbra.

Examiner

Rui Leite (2016), “Dimensionamento de Pórticos de Pavilhões Industriais Recorrendo a Métodos de Cálculo Avançado”. Master Thesis in Civil Engineering (Specialisation in Structural Mechanics), University of Coimbra.

Advisor

Bruno Pedrosa (2016), “Fatigue analysis of bolted connections with adhesives”. Master Thesis in Civil Engineering (Specialisation in Structural Mechanics), University of Coimbra.

Examiner

João Seixas (2016), “Avaliação experimental do desempenho de novas configurações de chapas metálicas de revestimento”. Master Thesis in Civil Engineering (Specialisation in Structural Mechanics), University of Coimbra.

Examiner

Catarina Dinis (2016), “Estudo laboratorial sobre o aproveitamento da água da chuva em telhados cerâmicos”. Master Thesis in Environmental Engineering (Specialisation in Territory and Environmental Management), University of Coimbra.

President

Anita Gumiela (2016), “Construction design of Hotel with Spa using BIM technology”. Master Thesis in Civil Engineering (Specialisation in Structural Mechanics), University of Coimbra.

Advisor

Katarzyna Brodowska (2016), “The use of modern design tools in BIM technology. Conceptual design of Community Centre in Rzeszów”. Master Thesis in Civil Engineering (Specialisation in Structural Mechanics), University of Coimbra.

Advisor

João Rodrigues (2016), “Caracterização experimental de elementos em aço com secção variável”. Master Thesis in Civil Engineering (Specialisation in Structural Mechanics), University of Coimbra.

Advisor

Alberto Simões (2015), “Otimização de vigamento secundário em estruturas metálicas”. Master Thesis in Steel and Composite Construction, University of Coimbra.

Examiner

Gulzaib Anwar (2015), “Assessment and validation of an Ayrton-Perry design methodology for the verification of flexural and lateral torsional buckling of prismatic beam-columns”. Master Thesis in Steel and Composite Construction<sup>4</sup>, University of Coimbra.

Examiner

Ruben Leal (2015), “Construção Modular em LSF – Estudo do comportamento térmico passivo”. Master Thesis in Civil Engineering (Specialisation in Structural Mechanics), University of Coimbra.

Examiner

Jorge Silva (2014), “Estudo de um mecanismo de geração de energia a partir das ondas do mar”. Master Thesis in Civil Engineering (Specialisation in Structural Mechanics), University of Coimbra.

Examiner

Tiago Manco (2014), “Avaliação comparativa da regulamentação para estruturas *offshore* (API, ISO, NORSOK e EC3)”. Master Thesis in Civil Engineering (Specialisation in Structural Mechanics), University of Coimbra.

Advisor

## 7.6 Publications

- |                      |   |
|----------------------|---|
| National Conferences | <p>Tiago Ribeiro, João Pedro Martins, Hélder Craveiro (2017), “Momentos Fletores Críticos – Uma Comparação de Métodos Analíticos e Numéricos Simples com Análises Lineares de Estabilidade usando o MEF”, <i>Atas do XI Congresso de Construção Metálica e Mista</i>, pp. 963-974, Coimbra.</p> <p>Miguel Correia, João Pedro Martins, Constança Rigueiro, Rui Matos (2017), “Robustness, Redundancy and Progressive Collapse of fixed offshore structures”, <i>Atas do XI Congresso de Construção Metálica e Mista</i>, pp. 115-126, Coimbra.</p> <p>Filip Ljubinković, João Pedro Martins, Carlos Leitão, Luís Simões da Silva (2017), “Experimental analysis of unstiffened cylindrically curved panels”. <i>Atas do XI Congresso de Construção Metálica e Mista</i>, pp. 843-852, Coimbra.</p> <p>André Biscaya da Graça, José Oliveira Pedro, João Pedro Martins, António Reis (2017), “Estado da Arte em Pontes incluindo painéis cilíndricos metálicos na secção transversal”. <i>Atas do XI Congresso de Construção Metálica e Mista</i>, pp. 503-512, Coimbra.</p> |
|----------------------|---|

<sup>4</sup> Master Thesis within the framework of the European Erasmus Mundus Masters SUSCOS (Sustainable Constructions under Natural Hazards and Catastrophic Events).

Tiago Manco, João Pedro Martins, Constança Rigueiro, Luís Simões da Silva (2017), “Metodologia semi-analítica para a previsão do comportamento pós-encurvadura de painéis curvos cilíndricos sob compressão uniaxial”. *Atas do XI Congresso de Construção Metálica e Mista*, pp. 85-94, Coimbra.

Ricardo Breda, João Pedro Martins, Ashkan Shahbazian, Luís Simões da Silva, (2015), “Estudo experimental do comportamento de colunas pré-esforçadas de elevada esbelteza”. *Atas do X Congresso de Construção Metálica e Mista*, pp. 565-574 (II), Coimbra.

Tiago Manco, João Pedro Martins, Constança Rigueiro, Luís Simões da Silva (2015), “Comportamento de painéis curvos reforçados sujeitos a ações de pressão de curta duração”. *Atas do X Congresso de Construção Metálica e Mista*, pp. 15-24 (II), Coimbra.

João Rodrigo, João Pedro Martins, Trayana Tankova, Liliana Marques, Luís Simões da Silva (2015), “Avaliação Experimental do comportamento de elementos metálicos de secção variável”. *Atas do X Congresso de Construção Metálica e Mista*, pp. 363-372 (II), Coimbra.

Miguel Moya, Constança Rigueiro, João Pedro Martins, Luís Simões da Silva (2014), “Análise numérica de ligações tubulares em estruturas *offshore*”. *Actas do III Congresso Luso-Africano de Construção Metálica Sustentável*, pp. 11-15-26, Luanda.

Tiago Manco, João Pedro Martins, Constança Rigueiro, Luís Simões da Silva (2014), “Análise comparativa de regulamentação *offshore*”. *Actas do III Congresso Luso-Africano de Construção Metálica Sustentável*, pp. 11-5-14, Luanda.

Hugo Augusto, José Castro, Carlos Rebelo, Luís Simões da Silva, João Pedro Martins (2014), “Determinação da resistência de ligações viga-coluna através da resposta linearizada de modelos de elementos finitos segundo o EC3”. *Actas do III Congresso Luso-Africano de Construção Metálica Sustentável*, pp. 11-83-92, Luanda.

João Pedro Martins, Luís Simões da Silva, António Reis (2013), “Determinação da resistência de painéis curvos isolados em aço”. *Actas do IX Congresso de Construção Metálica e Mista & I Congresso Luso-Brasileiro de Construção Metálica Sustentável*, pp. 507-516, Porto.

Sandra Jordão, Marco Pinho, João Pedro Martins, Aldina Santiago (2013), “Modelação numérica de vigas de vidro laminado”. *Actas do IX Congresso de Construção Metálica e Mista & I Congresso Luso-Brasileiro de Construção Metálica Sustentável*, pp. 847-856, Porto.

João Pedro Martins, Luís Simões da Silva, António Reis (2011), “Efeito da geometria na resistência de painéis curvos em aço”. *Actas do VIII Congresso de Construção Metálica e Mista*, pp. 365-372, Guimarães.

João Pedro Martins, L. F. Costa Neves, P. C. G. Da S. Vellasco (2009), “Avaliação do Comportamento Estrutural de Conectores em Estruturas Mistas”. *Actas do VII Congresso de Construção Metálica e Mista*, pp. 441-448, Lisboa.

#### International Conferences

Filip Ljubinković, João Pedro Martins, Helena Gervásio, Luís Simões da Silva (2018), “Experimental investigation on the bridge segments with transversally curved bottom flange”, *9<sup>th</sup> International Symposium on Steel Bridges*, Prague. (published online at: *IOP Conference Series: Materials Science and Engineering* 419(1), art. no. 012042).

doi: 10.1088/1757-899X/419/1/012042

Nuno Silvestre, António Duarte, João Pedro Martins, Luís Simões da Silva (2018), “Buckling and Postbuckling of Cylindrical Panels for Steel Bridge Girders”, *10<sup>th</sup> European Solid Mechanics Conference*, Bologna.

Tiago Manco, João Pedro Martins, Constança Rigueiro, Luís Simões da Silva (2018), “Semi-analytical model to predict the post-buckling behaviour of cylindrically curved panels under uni-axial compression and out-of-plane loading”, *Proceedings of the 8<sup>th</sup> International Conference on Thin-Walled Structures*, paper 181, Lisbon.

Trayana Tankova, João Pedro Martins, Luís Simões da Silva, Liliana Marques (2017), “Numerical model for the buckling behaviour of tapered steel members based on experimental tests”. *Proceedings of Eurosteel 2017 – 8<sup>th</sup> European Conference on Steel Structures*, 1106-1115, Copenhagen. (published online at: *ce/papers*, 1(2-3), 1106-1115)

doi: 10.1002/cepa.151

Filip Ljubinković, João Pedro Martins, Helena Gervásio, Luís Simões da Silva (2017), “Curved panels in bridge design”. *Proceedings of Eurosteel 2017 – 8<sup>th</sup> European Conference on Steel Structures*, 888-897, Copenhagen. (published online at: *ce/papers*, 1(2-3), 888-897)

doi: 10.1002/cepa.129

Tiago Manco, João Pedro Martins, Constança Rigueiro, Luís Simões da Silva (2016), “Numerical analysis of stiffened curved steel panels under compression”. *Proceedings of the 8<sup>th</sup> International Conference on Steel and Aluminium Structures*, paper 28, Hong Kong.

Melle Gruppelaar, Ricardo Carmona, João Pedro Martins (2016), “Comparative Study on S355 and Friction Stir Welded EN AW 7075-T6 Truss Beams for Buildings and Bridges” *Proceedings of the 8<sup>th</sup> International Conference on Steel and Aluminium Structures*, paper 84, Hong Kong.

Tiago Manco, Constança Rigueiro, João Pedro Martins, Luís Simões da Silva (2016), “Analysis of pre-compressed steel tubular members under lateral impact: A parametric study”. *Proceedings of the International Colloquium on Stability and Ductility of Steel Structures 2016*, pp. 963-971, Timisoara.

Trayana Tankova, João Rodrigues, Liliana Marques, João Pedro Martins, Luís Simões da Silva (2016), “Experimental study on the buckling behaviour of tapered structural members”. *Proceedings of the International Colloquium on Stability and Ductility of Steel Structures 2016*, pp. 565-572, Timisoara.

João Pedro Martins, Luís Simões da Silva (2015), “Ultimate strength of cylindrically curved steel panels under generalised in-plane stresses”. *Proceedings of 8<sup>th</sup> International Conference on Advances in Steel Structures*, paper 128, Lisbon.

Tiago Manco, João Pedro Martins, Constança Rigueiro, Luís Simões da Silva (2015), “Comparative assessment of the design of tubular elements according to offshore design standards and Eurocode 3”. *Proceedings of 15<sup>th</sup> International Symposium on Tubular Structures*, pp. 245-252, Rio de Janeiro.

doi: 10.1201/b18410-40

Scopus

Citations: -

João Pedro Martins, Darko Beg, Franc Sinur, Luís Simões da Silva (2014), “Analysis of cylindrically curved panels: An imperfection sensitivity study”. *Proceedings of Eurosteel 2014 – 7<sup>th</sup> European Conference on Steel Structures*, paper 08-173, Naples.

Sandra Jordão, Marco Pinho, Luís Costa Neves, João Pedro Martins and Aldina Santiago (2014), “Behaviour of laminated glass beams reinforced with pre-stressed cables”, *Proceedings of Eurosteel 2014 – 7<sup>th</sup> European Conference on Steel Structures*, paper 01-485 Naples.

Sandra Jordão, Marco Pinho, João Pedro Martins, Aldina Santiago, Paulo Cruz (2014), “Numerical modelling of a laminated glass beam reinforced with pre-stressed cable”, *Proceedings of the Challenging Glass 4 and Cost Action TU0905 Final Conference*, pp. 253-260, London.

doi: 10.1201/b16499-38

Scopus

Citations: -

João Pedro Martins, Luís Simões da Silva (2012), “Eigenvalue Analysis of Sandwich Panels Loaded in Uniaxial Compression”, *Proceedings of 6<sup>th</sup> International Conference on Coupled Instabilities in Metal Structures*, pp. 603-610, Glasgow.

Luís Simões da Silva, Liliana Marques, João Pedro Martins (2011), “Stability and Design of Thin-walled Steel Shells”, *Proceedings of the 6<sup>th</sup> International Conference on Thin-Walled Structures*, Keynote Lecture, pp. 87-98, Timisoara.

Luís Costa Neves, João Pedro Martins, P. C. G. Da S. Vellasco (2011), “Influence of Perfobond Connectors Disposition”, *Proceedings of Eurosteel 2011 – 6<sup>th</sup> European Conference on Steel Structures*, pp. 519-524, Budapest.

#### Peer reviewed International Journals

T. Tankova, J. P. Martins, L. Simões da Silva, L. Marques, H. Craveiro, A. Santiago (2018), “Experimental lateral-torsional buckling behaviour of web tapered I-section steel beams”, *Engineering Structures* 168, 355-370.

doi: 10.1016/j.engstruct.2018.04.084

T. Tankova, J. P. Martins, L. Simões da Silva, R. Simões, H. Craveiro (2018), “Experimental Buckling Behaviour of Web Tapered I-Section Steel Columns”, *Journal of Constructional Steel Research* 147, 293-312.

doi: 10.1016/j.jcsr.2018.04.015

T. Manco, J. P. Martins, C. Rigueiro, L. Simões da Silva (2018), “Semi-analytical model for the prediction of the postbuckling behaviour of unstiffened cylindrically curved steel panels under uniaxial compression”, *Marine Structures* 59, 387-400.

doi: 10.1016/j.marstruc.2018.02.007

J. P. Martins, F. Ljubinković, L. Simões da Silva, H. Gervásio (2018), “Behaviour of thin-walled curved steel plates under generalised in-plane stresses: A review”, *Journal of Constructional Steel Research* 140, 191-207.

doi: 10.1016/j.jcsr.2017.10.018

J. P. Martins, N. Silvestre, L. Simões da Silva (2016), “Energy-based analytical model to predict the elastic critical behaviour of curved panels”, *Journal of Constructional Steel Research* 127, 165-175.

doi: 10.1016/j.jcsr.2016.07.029

J. P. Martins, A. Shahbazian, L. Simões da Silva, C. Rebelo, R. Simões (2016), “Structural behaviour of prestressed stayed columns with single and double cross-arms using normal and high strength steel”, *Archives of Civil and Mechanical Engineering* 16, 618-633.

doi: 10.1016/j.acme.2016.04.004

T. Manco, C. Rigueiro, J. P. Martins, L. Simões da Silva (2016), “Comparative assessment of the design of tubular elements according to offshore design standards and Eurocode 3”, *Steel Construction: Design & Research* 9(4), 266-178.

doi: 10.1002/stco.201610031

J. P. Martins, Darko Beg, Franc Sinur, L. Simões da Silva, A. Reis (2015), “Imperfection sensitivity analysis of cylindrically curved steel panels”, *Thin-Walled Structures* 89, 101-115.

doi: 10.1016/j.tws.2014.12.014

J. P. Martins, L. Simões da Silva, L. Marques and M. Pircher (2014), “Eigenvalue analysis of curved sandwich panels loaded in uniaxial compression”, *Romanian Journal of Technical Sciences Applied Mechanics* 59, 87-104.

S. Jordão, M. Pinho, L. F. Costa Neves, J. P. Martins and A. Santiago (2014), “Behaviour of laminated glass beams reinforced with pre-stressed cables”, *Steel Construction: Design & Research* 7(3), 204-207.

doi: 10.1002/stco.201410027

J. P. Martins, L. Simões da Silva, A. Reis (2014), “Ultimate load of cylindrically curved panels under in-plane compression and bending – Extension of rules from EN 1993-1-5”, *Thin-Walled Structures* 77, 36-47.

doi: 10.1016/j.tws.2013.11.012

J. P. Martins, L. Simões da Silva, A. Reis (2013), “Eigenvalue analysis of cylindrically curved panels under compressive stresses – extension of rules from EN 1993-1-5”, *Thin-Walled Structures* 68, 183-194.

doi: 10.1016/j.tws.2013.03.010

J. P. Martins, L. F. Costa Neves, P. C. G. S. Vellasco (2010), “Experimental evaluation of the structural response of Perfobond shear connectors”, *Engineering Structures* 32, 1976-1985.

doi: 10.1016/j.engstruct.2010.02.031

#### Reports for Research Projects

#### High Strength Long Span Structures – HILONG (RFCS-CT-2012-00028)

P. Francis, E. Aggelopoulos, N. Baddoo, F. McCormick, L. Simões da Silva, J. P. Martins, P. Manoleas, M. Veljkovic, A. Tran, C. Baniotopoulos, M. Theofanous, M. Gkantou, L. Gardner, S. Afshan, L. Cederfeldt, S. Herion, O. Fleischer (2016), “High Strength Long Span Structures – Final Report”, HILONG (RFCS-CT-2012-00028): Final Report.

T. Tankova, J. P. Martins, L. Simões da Silva (2016), “Design guidance on prestressed stayed columns”, HILONG (RFCS-CT-2012-00028): Deliverable 4.3a.

J. P. Martins, R. Breda, L. Simões da Silva (2016), “Numerical analysis of prestressed stayed columns”, HILONG (RFCS-CT-2012-00028): Deliverable 4.1.2.

Paulo Silva, Carlos Rebelo, J. P. Martins (2015), “Vibrations considerations and modal identification of prestressed cable stayed columns”, HILONG (RFCS-CT-2012-00028): Deliverable 4.2.5a.

R. Breda, J. P. Martins, L. Simões da Silva (2015), “Tests on prestressed stayed columns”, HILONG (RFCS-CT-2012-00028): Deliverable 4.1.1.

R. Breda, H. Gervásio, J. P. Martins, L. Simões da Silva (2015), “Environmental impact and cost comparison”, HILONG (RFCS-CT-2012-00028): WP1 Deliverable 1.4.

R. Breda, J. P. Martins, L. Simões da Silva (2015), “Detailing of future configurations & Re-design of case study 1 in HSS using innovative solutions and methodologies”, HILONG (RFCS-CT-2012-00028): Deliverables 1.2.2 & 1.3.

#### Optimal and aesthetic design of curved steel bridges – OUTBURST (RFCS-2015-709782)

F. Ljubinković, J. P. Martins, L. Simões da Silva (2018), “Experimental results of tests on prototype bridge segments”, OUTBURST (Contract no. 709782): Deliverable 7.2.

- L. Simões da Silva, J. P. Martins, F. Ljubinkovic, P. Može, S. Piculin, U. Kuhlmann, V. Pourostad, A. Reis, J. O. Pedro, G. Dorrer, J. Eitelberger, M. Pircher, C. Hendy, F. Saba (2018), "Optimal and aesthetic design of curved steel bridge", OUTBURST (Contract no. 709782): 1<sup>st</sup> Report.
- H. Gervásio, F. Ljubinković, J. P. Martins, L. Simões da Silva (2018), "Report on the survey "Public perception on bridge aesthetics", OUTBURST (Contract no. 709782): Deliverable 3.2.
- A. Reis, J. O. Pedro, A. B. Graça, C. Hendy, P. Romoli, L. Simões da Silva, J. P. Martins (2017), "Report on the characterization of relevant parameters of curved plated bridge structures and identification of bridge cases where they can be found", OUTBURST (Contract no. 709782): Deliverable 2.1.
- L. Simões da Silva, J. P. Martins, P. Može, U. Kuhlmann, M. Pircher, A. Reis, G. Dorrer (2016), "State-of-the-art Report", OUTBURST (Contract no. 709782): Deliverable 1.1. A. Reis, J. O. Pedro, A. B. Graça, C. Hendy, P. Romoli, L. Simões da Silva, J. P. Martins (2017), "Report on the characterization of relevant parameters of curved plated bridge structures and identification of bridge cases where they can be found", OUTBURST (Contract no. 709782): Deliverable 2.1.
- L. Simões da Silva, J. P. Martins, P. Može, U. Kuhlmann, M. Pircher, A. Reis, G. Dorrer (2016), "State-of-the-art Report", OUTBURST (Contract no. 709782): Deliverable 1.1.
- Dissertations João Pedro Martins (2014), "Behaviour of cylindrically curved steel panels under in-plane stresses", Ph.D. Thesis in Steel and Composite Construction, University of Coimbra.
- João Pedro Martins (2008), "Avaliação do comportamento estrutural de conectores em estruturas mistas: o Perfobond", Master Thesis in Civil Engineering (Specialisation in Structural Mechanics), University of Coimbra.
- Book editions Luís Simões da Silva, Paulo Vila Real, Paulo Piloto, João Pedro Martins (eds.) (2017), "Atas do XI Congresso de Construção Metálica e Mista", cmm, Coimbra.
- ISBN: 978-989-99226-6-2
- Teaching Material João Pedro Martins (2016), "Dimensionamento de estruturas metálicas por elementos finitos", [Slides]. *Master in Steel and Composite Construction*, Civil Department, University of Coimbra, 16 September to 18 de November, 2016, Coimbra.
- Available in <https://inforestudante.uc.pt/>

## 7.7 Participation in Conferences

- National Conferences XI Congresso de Construção Metálica e Mista, Coimbra
- X Congresso de Construção Metálica e Mista, Coimbra
- III Congresso Luso-Africano de Construção Metálica Sustentável, Luanda<sup>5</sup>
- IX Congresso de Construção Metálica e Mista, Porto<sup>5</sup>
- VIII Congresso de Construção Metálica e Mista, Guimarães<sup>5</sup>
- VII Congresso de Construção Metálica e Mista, Lisboa<sup>5</sup>
- International Conferences 8<sup>th</sup> International Conference on Steel and Aluminium Structures (ICSAS 2016), Hong Kong<sup>5</sup>
- 8<sup>th</sup> International Conference on Advances in Steel Structures (ICASS 2015), Lisbon<sup>5</sup>
- 15<sup>th</sup> International Symposium on Tubular Structures (ISTS 2015), Rio de Janeiro<sup>5</sup>
- 7<sup>th</sup> European Conference on Steel Structures (Eurosteel 2014), Naples<sup>5,6</sup>

<sup>5</sup> Participation with oral presentation

<sup>6</sup> Participation with poster presentation

6<sup>th</sup> International Conference on Coupled Instabilities in Metal Structures (ICTWS 2014), Glasgow<sup>5</sup>

## 7.8 Presentations in International Committees

- ECCS TWG 8.3 – Plate Buckling
- João Pedro Martins, Luís Simões da Silva (2015), “OUTBURST project: Optimization of Steel Plated Bridges in Shape and Strength”, *TWG8.3 23<sup>rd</sup> Official Meeting*, London.
- João Pedro Martins, Luís Simões da Silva (2015), “Ultimate strength of cylindrically curved panels under biaxial loading”, *TWG8.3 20<sup>th</sup> Official Meeting*, Budapest.
- João Pedro Martins, Luís Simões da Silva, Franc Sinur (2014), “Ultimate resistance of long cylindrically curved panels: Influence of geometric imperfections”, *TWG8.3 18<sup>th</sup> Official Meeting*, Bratislava.
- João Pedro Martins, Luís Simões da Silva, Darko Beg (2014), “Imperfection sensitivity study on long cylindrically curved panels”, *TWG8.3 17<sup>th</sup> Official Meeting*, Berlin.
- Luís Simões da Silva, João Pedro Martins (2013), “Ultimate load of cylindrically curved panels under compressive stresses”, *TWG8.3 16<sup>th</sup> Official Meeting*, Barcelona.
- Luís Simões da Silva, João Pedro Martins (2012), “Eigenvalue analysis of cylindrically curved panels under compressive stresses: Extension of EN1993-1-5 rules”, *TWG8.3 15<sup>th</sup> Official Meeting*, Liège.
- Luís Simões da Silva, João Pedro Martins (2011), “The Effect of Geometry on curved panels resistance”, *TWG8.3 12<sup>th</sup> Official Meeting*, Paris.

## 7.9 Technical Translations

- Standards
- IPQ (2017), NP EN 1993-2, Eurocódigo 3 – Projeto de Estruturas de Aço – Parte 2: Pontes em aço.
- Member of the team in charge for translate into Portuguese the European Standard *EN 1993-2, Eurocode 3 – Design of steel structures - Part 2: Steel Bridges*.

## 7.10 Refereeing

- Peer reviewed  
International Journals
- Thin-Walled Structures, Elsevier
- Engineering Structures, Elsevier
- Journal of Constructional Steel Research, Elsevier
- Structures, Elsevier
- Steel Construction – Design & Research, Ernst & Sohn
- Proceedings of the Institution of Civil Engineers - Structures and Buildings, ICE Publishing
- Mechanics of Advanced Materials and Structures, Taylor & Francis Inc.



#### 7.11 Participation in Conference Scientific Committees

- |                      |  |
|----------------------|--|
| National Conferences | Member of the Scientific Committee of the XI Congresso de Construção Metálica e Mista, cmm, Coimbra in 2017. |
|                      | Member of the Organizing Committee do XI Congresso de Construção Metálica e Mista, cmm, Coimbra em 2017.     |

### 8. Industry Activity

#### 8.1 Participation in Engineering Projects

- |                       |  |
|-----------------------|--|
| Tetraplano Engenharia | <p>Construction project of the <i>Parque de Manutenção e Oficinas do Entroncamento</i> – Structural Engineering Design (Steel Structures) / SIEMENS, 2010.</p> <p>Client: COBA</p> <p>Preparation of construction/execution of detailing drawings for GOVE's Dam (Detailing of steel reinforcement), 2008-2010.</p> <p>Client: COBA</p> <p>Construction project of the <i>Edifício dos Bombeiros e de Material de Placa da Aerogare do GOVE</i> – Structural Engineering Design (Concrete structures), 2009.</p> <p>Client: COBA</p> <p>Construction project of the <i>Aerogare do GOVE</i> – Structural Engineering Design (Concrete structures), 2009.</p> <p>Client: COBA</p> <p>Construction project of the <i>Túnel do Covo</i>, 2009.</p> <p>Client: COBA</p> <p>Competition for High Speed Train implementation in Portugal / Structural Engineering Design of <i>Évora's Train Station</i>, 2008-2009.</p> <p>Client: Consórcio ELOS</p> <p>Structural Engineering Design of a Small bridge in PETROGAL's fuel park, 2008.</p> <p>Client: DATAGEO</p> <p>Competition for the Structural Engineering Design of <i>St. Stephen's Green and Parnell Square metro stations in Dublin</i>, 2008.</p> <p>Client: COBA</p> <p>Re-adaptation of the <i>School Custódio Marques</i> – Structural Engineering Design (Concrete structures), 2008.</p> <p>Client: Espaço Cidade</p> |
|-----------------------|--|

#### 8.2 Expert & Technical Opinions and Specialised Consulting

- |  |  |
|--|--|
| Administrative and Tax Courts<br>(Portuguese Republic) | Appointed for specialised technical consulting, 2016.  |
| Matereospace   | <p>Technical consulting for the study of a new system for bridge construction, 2015.</p> <p>Client: BERD</p> |

DEC-FCTUC/ACIV    **Stability analysis of the panels of Birmingham New Street Station facade (elaboration of several technical reports), 2012-2013.**

Client: MARTIFER Construções

**Stability analysis of water tanks in steel, 2011.**

Client: CONSTÁLICA