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## Production Scientifique / Scientific production

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### Brevets / Patents

- [BR 1] M. Torres-Luque, J.F. Osma, M. Sanchez-Silva, E. Bastidas-Arteaga, F. Schoefs. System for assessing chloride concentration and corresponding method and sensor. European patent : EP15306128. 9 July 2015

### Conférences invitées / Keynote Lectures

- [CI 1] Bastidas-Arteaga E. *Matériaux et Structures des EMR : de la conception à la maintenance*. Journée de la recherche de l'ICAM sur les énergies marines renouvelables. 29/11/2017, Technocampus Ocean, Nantes, France
- [CI 2] Bastidas-Arteaga E. *Comment déterminer la fiabilité des composants bois soumis à des sollicitations mécaniques et climatiques ?* Journée technique : le numérique dans les industries bois. 01/06/2017, Ecole Supérieure du Bois, Nantes, France
- [CI 3] Bastidas-Arteaga E. *Maintenance et outils de l'aide à la décision dans un contexte de développement durable*. XIIème Colloque Management de la Maintenance. Optimisation de la maintenance: connectivité, aide à la décision, ergonomie. Arts et Metiers – ParisTech, 18/05/2017, Paris, France
- [CI 4] Bastidas-Arteaga E. *Adaptation des ouvrages en béton armé côtiers face au changement climatique*. Université Technique de construction de Bucarest. Bucarest, Roumanie, 2014.
- [CI 5] Bastidas-Arteaga E. *Evaluation of the effectiveness of adaptation techniques for existing structures under climate change: application to RC structures in marine environments in France*. In: Workshop in durability of structures in marine environments. Barranquilla, Colombia, 2013.
- [CI 6] Bastidas-Arteaga E. *Reliability and probabilistic methods applied to maintenance of marine structures*. In: Catedra Europa, Universidad del Norte, Barranquilla, Colombia. 2012.

### Ouvrages scientifiques / Books

- [OS 1] Bastidas-Arteaga E. *Probabilistic service life model of RC structures subjected to the combined effect of chloride-induced corrosion and cyclic loading*. ISBN 978-958-695-484-6, Ediciones Uniandes, Bogotá, Colombia 2010. 173 pp.

### Ouvrages scientifiques édités / Edited books

- [OSE 1] Bastidas-Arteaga E, Stewart M (2019). Editors. *Climate Adaptation Engineering: Risks and Economics for Infrastructure Decision-Making*. Butterworth-Heinemann. ISBN: 978-0-12-816782-3. 416 pp.  
<https://doi.org/10.1016/B978-0-12-816782-3.09993-9>

## Articles dans des revues scientifiques internationales avec comité de lecture / Papers in International Refereed Journals

### Notations

\* Auteur correspondant / Corresponding author

§ Etudiant de master, doctorant ou post doctorant / Master student, PhD student or postdoct

### Publiés/Published

- [ACL 1] Salman AM\*, Salarieh B, **Bastidas-Arteaga E**, Li Y. (2020). Optimization of Condition-Based Maintenance of Wood Utility Pole Network Subjected to Hurricane Hazard and Climate Change. *Frontiers in Built Environment, section Computational Methods in Structural Engineering*.6(73):1-18 <https://doi.org/10.3389/fbuil.2020.00073> WoS
- [ACL 2] Imounga M§, **Bastidas-Arteaga E\***, Moutou Pitti R, Ekomy Ango S, Wang XH. (2020). Bayesian assessment of the effects of cyclic loads on the chloride ingress process into reinforced concrete. *Applied Sciences*, 10(6):2040. <https://doi.org/10.3390/app10062040> WoS
- [ACL 3] Tran T-B§, **Bastidas-Arteaga E\***, Aoues Y. (2020). Spatial Time-Dependent Reliability Assessment and Updating of Timber Structures Subjected to Decay Deterioration. *Engineering Structures*, 209:110301 <https://doi.org/10.1016/j.engstruct.2020.110301> WoS
- [ACL 4] **Bastidas-Arteaga E\***, El Soueidy C-P, Amiri O, Nguyen P-T§ (2020). Polynomial Chaos Expansion for lifetime assessment and sensitivity analysis of reinforced concrete structures subjected to chloride ingress. *Structural Concrete*. In press <https://doi.org/10.1002/suco.201900398> WoS
- [ACL 5] Amaya-Gómez R\*§, **Bastidas-Arteaga E**, Schoefs F, Muñoz F, Sánchez-Silva M. (2020). A Condition-Based Dynamic Segmentation of Large Systems using a Changepoints algorithm: A Corroding Pipeline case. *Structural Safety* 82:101912 1-15. <https://doi.org/10.1016/j.strusafe.2019.101912> WoS
- [ACL 6] Creach A\*, **Bastidas-Arteaga E**, Pardo S., Mercier D. (2020). Vulnerability and costs of adaptation strategies for housing subjected to flood risks: application to La Guérinière France. *Marine Policy*, 117: 103438 1-13 <https://doi.org/10.1016/j.marpol.2019.02.010>. WoS
- [ACL 7] Amaya-Gómez R\*§, Sánchez-Silva M, **Bastidas-Arteaga E**, Schoefs F, Muñoz F, (2019). Spatial and Temporal Corrosion Degradation Modelling with A Lévy Process based on ILI (In-Line) Inspections. *Chemical Engineering Transactions*. 77:823-28 <https://doi.org/10.3303/CET1977138>. *Scopus*
- [ACL 8] Rakotovao Ravahatra N\*§, **Bastidas-Arteaga E**, Schoefs F, Duprat F, de Larrard T, Oumouni M. (2019). Characterisation and propagation of spatial fields in deterioration models: application to concrete carbonation. *European Journal of Environmental and Civil Engineering*. 1-28 <https://doi.org/10.1080/19648189.2019.1620133>. WoS
- [ACL 9] Rakotovao Ravahatra N§, **Bastidas-Arteaga E\***, Schoefs F, de Larrard T, Duprat F. (2019). Probabilistic and sensitivity analysis of analytical models of corrosion onset for reinforced concrete structures. *European Journal of Environmental and Civil Engineering*. 1-30 <https://doi.org/10.1080/19648189.2019.1591307>. WoS
- [ACL 10] Amaya-Gómez R\*§, Riascos-Ochoa J, Muñoz F, **Bastidas-Arteaga E**, Schoefs F, Sánchez-Silva M. (2019). Modeling of pipeline corrosion degradation mechanism with a Lévy Process based on ILI (In-Line) Inspections. *International Journal of Pressure Vessels and Piping*, In press <https://doi.org/10.1016/j.ijpvp.2019.03.001>. WoS
- [ACL 11] Rueda-Bayona JG\*, Guzmán-Guerrero A, Cabello Eras J, Silva-Casarín R, **Bastidas-Arteaga E**, Horrillo-Caraballo J, (2019). Renewables energies in Colombia and the opportunity for the offshore wind technology. *Journal of Cleaner Production* 220:529-543 <https://doi.org/10.1016/j.jclepro.2019.02.174>. WoS
- [ACL 12] Amaya-Gómez R\*§, Sánchez-Silva M, **Bastidas-Arteaga E**, Schoefs F, Muñoz F. (2019). Reliability assessments of corroded pipelines based on internal pressure - A review. *Engineering Failure Analysis*, 98:190-214 <https://doi.org/10.1016/j.engfailanal.2019.01.064>. WoS
- [ACL 13] Tesfamariam S\*, **Bastidas-Arteaga E**, Lounis Z. (2018). Seismic Retrofit Screening of Existing Highway Bridges With Consideration of Chloride-Induced Deterioration: A Bayesian Belief Network Model. *Frontiers in Built Environment: Bridge Engineering*, 4:1–11. <https://doi.org/10.3389/fbuil.2018.00067>. *Scopus*
- [ACL 14] Tran T-B§, **Bastidas-Arteaga E\***, Aoues Y, Pambou Nziengui CF, Hamdi SE, Moutou Pitti R, Fournely E, Schoefs F, Chateaneuf A. (2018). Reliability assessment and updating of notched timber components subjected to environmental and mechanical loading. *Engineering Structures*, 166:107-16. <https://doi.org/10.1016/j.engstruct.2018.03.053>. WoS

- [ACL 15] **Bastidas-Arteaga E\***, (2018). Reliability of Reinforced Concrete Structures Subjected to Corrosion-Fatigue and Climate Change. *International Journal of Concrete Structures and Materials*, **12** (1): 1-10. <https://doi.org/10.1186/s40069-018-0235-x>. **WoS**
- [ACL 16] Wang XH\*, **Bastidas-Arteaga E**, Gao Y. (2018). Probabilistic analysis of chloride penetration in reinforced concrete subjected to pre-exposure static and fatigue loading and wetting-drying cycles. *Engineering Failure Analysis*, **84**: 205-219. <https://doi.org/10.1016/j.engfailanal.2017.11.008>. **WoS**
- [ACL 17] Tran T-BŞ, **Bastidas-Arteaga E\***, Schoefs F, Bonnet S. (2018). Bayesian Network Framework for Statistical Characterisation of Model Parameters from Accelerated Tests: Application to Chloride Ingress Into Concrete. *Structure and Infrastructure Engineering* **14**(5)580-93. <https://doi.org/10.1080/15732479.2017.1377737>. **WoS**
- [ACL 18] Rakotovoava RavahatraŞ N, Schoefs\* F, Duprat F, de Larrard T, **Bastidas-Arteaga E**. (2017). Assessing the capability of analytical carbonation models to propagate uncertainties and spatial variability of reinforced concrete structures. *Frontiers in Built Environment: Bridge Engineering*, **3**(1):1–9. <http://doi.org/10.3389/FBUIL.2017.00001>. **Scopus**
- [ACL 19] Teodorescu I\*Ş, Ţăpuşi D, Erbaşu R, **Bastidas-Arteaga E**, Aoues Y. (2017). Influence of the Climatic Changes on Wood Structures Behaviour. *Energy Procedia* **112**: 450–459, special issue: Sustainable Solutions for Energy and Environment, EENVIRO 2016, 26-28 October 2016, Bucharest, Romania, <http://doi.org/doi:10.1016/j.egypro.2017.03.1112>. **WoS**
- [ACL 20] Torres-Luque M\*Ş, Osma J F, Sánchez-Silva M, **Bastidas-Arteaga E** and Schoefs F (2017). Chloridetect: Commercial Calcium Aluminate Based Conductimetric Sensor for Chloride Presence Detection. *Sensors* **17**: 1–19, Special Issue Chemiresistive Sensors: Status and the Future, <https://doi.org/10.3390/s17092099>. **WoS**
- [ACL 21] Schoefs F, **Bastidas-Arteaga E\***, Tran T-V.Ş (2017). Optimal Embedded Sensor Placement for Spatial Variability Assessment of Stationary Random Fields. *Engineering Structures* **17**: 35–44. <https://doi.org/10.1016/j.engstruct.2017.08.070>. **WoS**
- [ACL 22] Diakhaté M\*, **Bastidas-Arteaga E**, Moutou Pitti R., Schoefs F. (2017). Cluster analysis of acoustic emission activity within wood material: towards a real-time monitoring of crack tip propagation. *Engineering Fracture Mechanics*. **180**: 254–267 <https://doi.org/10.1016/j.engfracmech.2017.06.006>. **WoS**
- [ACL 23] Salman AM\*, Li Y, **Bastidas-Arteaga E**. (2017). Maintenance Optimization for Power Distribution Systems Subjected to Hurricane Hazard, Timber Decay and Climate Change. *Reliability Engineering & System Safety*. **168**: 136-149, special issue: Maintenance Modelling, <http://dx.doi.org/10.1016/j.res.2017.03.002>. **WoS**
- [ACL 24] Nguyen P-TŞ, **Bastidas-Arteaga E\***, Amiri O, El Soueidy C-P. (2017). An efficient chloride ingress model for long-term lifetime assessment of reinforced concrete structures under realistic climate and exposure conditions. *International Journal of Concrete Structures and Materials*. **11**(2): 199–213 <http://doi.org/10.1007/s40069-017-0185-8>. **WoS**
- [ACL 25] Cárdenas-Gallo I\*Ş, Akhavan-Tabatabaei R, Sanchez-Silva M, **Bastidas-Arteaga E** (2016). A Markov regime-switching framework to forecast El Niño Southern Oscillation patterns. *Natural Hazards* **81**(2): 829-843. <http://doi.org/10.1007/s11069-015-2106-y>. **WoS**
- [ACL 26] Tran T-BŞ, **Bastidas-Arteaga E\***, Schoefs F (2016). Improved Bayesian network configurations for random variable identification of concrete chlorination models. *Materials and Structures*. **49**(11): 4705–4718. <http://doi.org/10.1617/s11527-016-0818-4>. **WoS**
- [ACL 27] Marquez-Peñaranda JF\*Ş, Sanchez-Silva M, Hussler J, **Bastidas-Arteaga E** (2016). Effects of biodeterioration on the mechanical properties of concrete. *Materials and Structures*. **49** (10): 4085–4099. <http://doi.org/10.1617/s11527-015-0774-4>. **WoS**
- [ACL 28] Tran T-BŞ, **Bastidas-Arteaga E\***, Schoefs F (2016). Improved Bayesian Network Configurations for Probabilistic Identification of Degradation Mechanisms: Application to Chloride Ingress. *Structure and Infrastructure Engineering*. **12**(9): 1162-1176. <http://doi.org/10.1080/15732479.2015.1086387>. **WoS**
- [ACL 29] Schoefs F, **Bastidas-Arteaga E\***, Tran T-VŞ, Villain G, Derobert X (2016). Characterization of Random Fields From NDT Measurements: a Two Stages Procedure. *Engineering Structures* **111**: 312–322. <http://dx.doi.org/10.1016/j.engstruct.2015.11.041>. **WoS**
- [ACL 30] **Bastidas-Arteaga E\***, and Stewart M G. (2016). Economic Assessment of Climate Adaptation Strategies for Existing RC Structures Subjected to Chloride-Induced Corrosion. *Structure and Infrastructure Engineering* **12**(4): 432–449, Special Issue: Decision-Making in a Changing Climate, <http://doi.org/10.1080/15732479.2015.1020499>. **WoS**

- [ACL 31] **Bastidas-Arteaga E\***, Schoefs F (2015). Sustainable Maintenance and Repair of RC Coastal Structures. *Maritime Engineering* **168**(4): 162–173. <http://doi.org/10.1680/jmaen.14.00018>. WoS
- [ACL 32] **Bastidas-Arteaga E\***, and Stewart M G. (2015). Damage risks and economic assessment of climate adaptation strategies for design of new concrete structures subject to chloride-induced corrosion. *Structural Safety* **52**: 40–53. <http://doi.org/10.1016/j.strusafe.2014.10.005>. WoS
- [ACL 33] Torres-Luque M\*§, **Bastidas-Arteaga E**, Schoefs F, Sánchez-Silva M, and Osma J F. (2014). Non-destructive methods for measuring chloride ingress into concrete: State-of-the-art and future challenges. *Construction and Building Materials* **68**: 68–81. <http://doi.org/10.1016/j.conbuildmat.2014.06.009>. WoS
- [ACL 34] De Larrard T\*, **Bastidas-Arteaga E**, Duprat F, and Schoefs F. (2014). Effects of climate variations and global warming on the durability of RC structures subjected to carbonation. *Civil Engineering and Environmental Systems* **31**(2): 153–164, Special Issue: Climate Change Risks to Civil Infrastructure, A Collection of Papers from the Eleventh International Conference on Structural Safety and Reliability, June 2013, Columbia University, New York, USA <http://doi.org/10.1080/10286608.2014.913033>. WoS
- [ACL 35] **Bastidas-Arteaga E\***, Schoefs F, Stewart M G, and Wang X. (2013). Influence of global warming on durability of corroding RC structures: A probabilistic approach. *Engineering Structures* **51**: 259–266. <http://doi.org/10.1016/j.engstruct.2013.01.006>. WoS
- [ACL 36] **Bastidas-Arteaga E\***, and Schoefs F. (2012). Stochastic improvement of inspection and maintenance of corroding reinforced concrete structures placed in unsaturated environments. *Engineering Structures* **41**: 50–62. <http://doi.org/10.1016/j.engstruct.2012.03.011>. WoS
- [ACL 37] **Bastidas-Arteaga E\***, Chateaufeuf A, Sánchez-Silva M, Bressolette P, and Schoefs F. (2011). A comprehensive probabilistic model of chloride ingress in unsaturated concrete. *Engineering Structures* **33**(3): 720–730. <http://doi.org/10.1016/j.engstruct.2010.11.008>. WoS
- [ACL 38] **Bastidas-Arteaga E\***, Schoefs F, Chateaufeuf A, Sánchez-Silva M, and Capra B. (2010). Probabilistic evaluation of the sustainability of maintenance strategies for RC structures exposed to chloride ingress. *International Journal of Engineering Under Uncertainty* **2**: 61–74. <https://hal.archives-ouvertes.fr/hal-00796729>
- [ACL 39] **Bastidas-Arteaga E\***, Chateaufeuf A, Sánchez-Silva M, Bressolette P, and Schoefs F. (2010). Influence of weather and global warming in chloride ingress into concrete: A stochastic approach. *Structural Safety* **32**(4): 238–249. <http://doi.org/10.1016/j.strusafe.2010.03.002>. WoS
- [ACL 40] **Bastidas-Arteaga E\***, Bressolette P, Chateaufeuf A, and Sánchez-Silva M. (2009). Probabilistic lifetime assessment of RC structures under coupled corrosion-fatigue processes. *Structural Safety* **31**(1): 84–96. <http://doi.org/10.1016/j.strusafe.2008.04.001>. WoS
- [ACL 41] **Bastidas-Arteaga E**, Sánchez-Silva M\*, Chateaufeuf A, and Ribas Silva M. (2008). Coupled reliability model of biodeterioration, chloride ingress and cracking for reinforced concrete structures. *Structural Safety* **30**(2): 110–129. <http://doi.org/10.1016/j.strusafe.2006.09.001>. WoS

*Soumis / Under Review*

- [ACL 42] Rakotovoava Ravahatra N§, de Larrard T, Duprat F, **Bastidas-Arteaga E\***, Schoefs F. (2020). A cost-benefit methodology for selecting analytical reinforced concrete corrosion onset models. Submitted to: *Advances in Civil Engineering*. WoS
- [ACL 43] Merschman E, Salman AM\*, **Bastidas-Arteaga E**, Li Y. (2020). Assessment of the Effectiveness of Wood Pole Repair Using FRP Considering the Impact of Climate Change on Decay and Hurricane Risk. Submitted to: *Advances in Climate Change Research*. WoS
- [ACL 44] Torres-Rincón S§\*, Sánchez-Silva M, **Bastidas-Arteaga E** (2020). A Multistage Stochastic Program for the Design and Management of Flexible Infrastructure Networks . Submitted to: *Reliability Engineering and System Safety*. WoS

## Chapitres dans ouvrages scientifiques collectifs / Book chapters

- [CO 1] **Bastidas-Arteaga E**, Stewart M G. (2019). Recommendations for Infrastructure Decision-Makers Under a Changing Climate. In E. Bastidas-Arteaga, M.G. Stewart (Eds.), *Climate Adaptation Engineering: Risks and*

*Economics for Infrastructure Decision-Making*. Butterworth-Heinemann <https://doi.org/10.1016/B978-0-12-816782-3.00012-7>

- [CO 2] Creach A., **Bastidas-Arteaga E**, Pardo S., Mercier D. (2019). Adaptation of Residential Buildings to Coastal Floods: Strategies, Costs and Efficiency. In E. Bastidas-Arteaga, M.G. Stewart (Eds.), *Climate Adaptation Engineering: Risks and Economics for Infrastructure Decision-Making*. Butterworth-Heinemann <https://doi.org/10.1016/B978-0-12-816782-3.00008-5>
- [CO 3] Stewart M. G., **Bastidas-Arteaga E**. (2019). Corrosion of Concrete and Steel Structures in a Changing Climate. In E. Bastidas-Arteaga, M.G. Stewart (Eds.), *Climate Adaptation Engineering: Risks and Economics for Infrastructure Decision-Making*. Butterworth-Heinemann <https://doi.org/10.1016/B978-0-12-816782-3.00004-8>
- [CO 4] Stewart M. G., **Bastidas-Arteaga E**. (2019). Introduction to Climate Adaptation Engineering. In E. Bastidas-Arteaga, M.G. Stewart (Eds.), *Climate Adaptation Engineering: Risks and Economics for Infrastructure Decision-Making*. Butterworth-Heinemann <https://doi.org/10.1016/B978-0-12-816782-3.00001-2>
- [CO 5] **Bastidas-Arteaga E**, Stewart M. G. (2019). Climate change impact on RC structures subjected to chloride ingress and carbonation-induced corrosion. In P. Gardoni (Ed.), *Routledge Handbook of Sustainable and Resilient Infrastructure* (chapter 32). ISBN: 9781138306875. Routledge. <https://doi.org/10.4324/97811315142074-32>
- [CO 6] **Bastidas-Arteaga E**, Stewart M. G. (2018). Cost-effective design to address climate change impacts. In F. Pacheco-Torgal, Robert Melchers, Xianming Shi, Nele de Belie, Kim Van Tittelboom, Andrés Sáez (Eds.), *Eco-efficient Repair and Rehabilitation of Concrete Infrastructures* (pp. 613–636). ISBN: 978-0-08-102181-1. Woodhead Publishing Series in Civil and Structural Engineering. <http://doi.org/10.1016/B978-0-08-102181-1.00022-8>
- [CO 7] Stewart M G, Val D V, **Bastidas-Arteaga E**, O'Connor A, Wang X. (2014). Climate Adaptation Engineering and Risk-Based Design and Management of Infrastructure. In D. Frangopol & Y. Tsompanakis (Eds.), *Maintenance and Safety of Aging Infrastructure* (pp. 641–684). CRC Press. <http://doi.org/10.1201/b17073-22>
- [CO 8] **Bastidas-Arteaga E**, Soubra A-H. (2014). Reliability Analysis Methods. In M. A. Hicks & C. Jommi (Eds.), *ALERT Doctoral School 2014 - Stochastic Analysis and Inverse Modelling* (pp. 53–77). Grenoble. Retrieved from <https://hal.archives-ouvertes.fr/in2p3-01084369>
- [CO 9] Soubra A-H, **Bastidas-Arteaga E**. (2014a). Advanced reliability analysis methods. In M. A. Hicks & C. Jommi (Eds.), *ALERT Doctoral School 2014 - Stochastic Analysis and Inverse Modelling* (pp. 79–93). Grenoble. Retrieved from <http://hal.in2p3.fr/in2p3-01084374>
- [CO 10] Soubra A-H, **Bastidas-Arteaga E**. (2014b). Functions of random variables. In M. A. Hicks & C. Jommi (Eds.), *ALERT Doctoral School 2014 - Stochastic Analysis and Inverse Modelling* (pp. 43–52). Grenoble. Retrieved from <http://hal.in2p3.fr/in2p3-01082914>

## Articles dans des conférences internationales avec comité de lecture et actes / Papers in Refereed International Conferences

N.B. : Le nom souligné correspond à la personne ayant présenté les travaux.

- [ACTI 1] Amaya-Gómez R, Sánchez-Silva M, Bastidas-Arteaga E, Schoefs F, Muñoz F. Spatial and temporal corrosion degradation modelling with a Lévy process based on ILI (In-Line) Inspections. 16th International Symposium on Loss Prevention and Safety Promotion in the Process Industries and accompanying exhibition. Delft, The Netherlands, 16-19 June, 2019.
- [ACTI 2] Salman A, Li Y, Bastidas-Arteaga E. System-level Maintenance Optimization for Power Distribution Systems Subjected to Hurricanes. 13th International Conference on Applications of Statistics and Probability in Civil Engineering, ICASP13 Seoul, South Korea, May 26-30, 2019
- [ACTI 3] Nsouami V, Bastidas-Arteaga E, Moutou Pitti R, Manfoumbi N. A database for spatial variability assessment of mechanical parameters of Ozigo specie under long-term bending tests in Gabon SEMC 2019: The Seventh International Conference on Structural Engineering, Mechanics and Computation, Cape Town, South Africa. ISBN 978-1-138-38696-9. p. 1762-1766 Sep 2-4 2019.
- [ACTI 4] Bastidas-Arteaga E, Alam SY, Wang XH, Li Y. Corrosion initiation Assessment of Concrete Components of Wind Turbines: overview and challenges. SMSS 2019, Challenges in design and management of structures, Rovinj, Croatia, March 18-22 2019

- [ACTI 5] Creach A, Gonzva M, Bastidas-Arteaga E, Pardo S, Mercier D. IALCCE 2018 Sixth International Symposium on Life-Cycle Civil Engineering, Ghent Belgium, October 28-31, 2018.
- [ACTI 6] Salman A, Li Y, Bastidas-Arteaga E. Impact of climate change on optimal wood pole asset management. IALCCE 2018 Sixth International Symposium on Life-Cycle Civil Engineering, Ghent Belgium, October 28-31, 2018.
- [ACTI 7] Bastidas-Arteaga E, Stewart M. Cost-Effective Climate Change Adaptation for Reinforced Concrete Structures Subjected to Chloride Ingress. IABSE Symposium: Tomorrow's Megastructures, Nantes, France, 17-21 September 2018.
- [ACTI 8] Tran TB, Bastidas-Arteaga E, Schoefs F. Statistical Characterisation of Chloride Ingress Parameters from Normal and Accelerated Tests. IABSE Symposium: Tomorrow's Megastructures, Nantes, France, 17-21 September 2018.
- [ACTI 9] Rakotovoavo Ravahatra N, Bastidas-Arteaga E, Schoefs F, de Larrard T, Duprat F. Spatial Correlation Characterization using Windowing Method, Transfer through Concrete Carbonation Models. IABSE Symposium: Tomorrow's Megastructures, Nantes, France, 17-21 September 2018.
- [ACTI 10] Torres-Luque M, Bastidas-Arteaga E, Sánchez-Silva M, Schoefs F. Non-destructive methods for measuring chloride ingress into concrete: challenges for the future. Proceedings of the 54th ESReDA Seminar on Risk, Reliability and Safety of Energy Systems In Coastal and Marine Environments, Université de Nantes, Nantes, France, April 25-26, 2018
- [ACTI 11] Wang XH, Bastidas-Arteaga E, Thanh-Binh T. Probabilistic Assessment of Chloride Ingress Processes into Cracked Reinforced Concrete Proceedings of the 54th ESReDA Seminar on Risk, Reliability and Safety of Energy Systems In Coastal and Marine Environments, Université de Nantes, Nantes, France, April 25-26, 2018
- [ACTI 12] Amaya-Gómez R, Sánchez-Silva M, Bastidas-Arteaga E, Schoefs F, Muñoz F. Modeling of a Multi-hazard degradation mechanism with a Lévy process based on ILI (In-Line) Inspections. Proceedings of the 54th ESReDA Seminar on Risk, Reliability and Safety of Energy Systems In Coastal and Marine Environments, Université de Nantes, Nantes, France, April 25-26, 2018
- [ACTI 13] Marquez-Peñaranda JE, Sanchez-Silva M, Husserl J, Bastidas-Arteaga E. Influence of biodeterioration on the mechanical properties of cement mortar. Final conference of RILEM TC 253-MCI Microorganisms-Cementitious Materials Interactions, Toulouse, France 25-26 June 2018,.
- [ACTI 14] Diakhaté M, Moutou Pitti R, Angellier N, Bastidas-Arteaga E, Hamdi S. Acoustic Emission Technique to monitor real-time wood fracture properties in room temperature. COST Action FP1407 3rd Conference: "Wood modification research and applications", Sep 2017, Kuchl, Austria.
- [ACTI 15] Tran T-B, Bastidas-Arteaga E, Aoues Y, Moutou Pitti R, Hamdi S, Fournely E. Updating the Reliability of cracked timber structures by using experimental results and numerical fracture model. COST ACTION FP1303 Technical Workshop Design, Application and Aesthetics of biobased building materials, Feb 2017, Sofia, Bulgaria.
- [ACTI 16] Avellaneda-Malagón G, Manfoumbi N, Bastidas-Arteaga E, Moutou Pitti R. Creep and moisture interaction on tropical timber structures under outdoor conditions: spatial variability of mechanical parameters. COST ACTION FP1303 Final Conference and MC Meeting Building with bio-based materials: Best practice and performance specification, Sep 2017, Zagreb, Croatia
- [ACTI 17] Tran T-B, Bastidas-Arteaga E, Aoues Y, Moutou Pitti R, Hamdi SE, Schoefs F, Pambou Nziengui CF, Fournely E. Coupled mechanics – probabilistic methodology for reliability assessment of timber structure with cracks subjected to thermo-visco-hydrromechanical. 14<sup>th</sup> International Conference on Fracture (ICF 14), Rhodes, Greece June 18-23, 2017.
- [ACTI 18] Schoefs E, Bastidas-Arteaga E. Optimal sensor placement for Spatial Variability Assessment of Structures. IABSE-COST 1406-COST1402 joint workshop: The Value of Structural Health Monitoring for the reliable Bridge Management. Zagreb 2-3 March 2017
- [ACTI 19] Tran T-B, Bastidas-Arteaga E, Aoues Y, Schoefs F. Dynamic Bayesian Networks for reliability updating of timber structures subjected to decay with consideration of spatial-variability. International Forum on Engineering Decision Making (IFED) Ninth Forum: Resilient Infrastructures – Integration of Risk and Sustainability, Stoos Switzerland, 7-10 December 2016
- [ACTI 20] Aoues Y, Riahi H., Hamdi S.E., Moutou Pitti R., Bastidas-Arteaga E. Optimal and reliable design of timber beams for a maximum breaking load considering thermal and hydrological effects. COST Action FP1407 2<sup>nd</sup> Conference – Innovative production technologies and increased wood products recycling and reuse. Brno, Czech Republic, 29-30 September 2016

- [ACTI 21] Diakhate M., Bastidas-Arteaga E., Pitti R.M., Schoefs F. Probabilistic Improvement of Crack Propagation Monitoring by Using Acoustic Emission. In: Zehnder A. et al. (eds) Fracture, Fatigue, Failure and Damage Evolution, Volume 8. Conference Proceedings of the Society for Experimental Mechanics Series. Springer. Orlando, USA, 2016 [http://dx.doi.org/10.1007/978-3-319-42195-7\\_16](http://dx.doi.org/10.1007/978-3-319-42195-7_16)
- [ACTI 22] Bastidas-Arteaga E, Schoefs F. Durability of harbour steel structures subjected to climate change. 51st Esreda Seminar on Maintenance and Life Cycle Assessment of Structures and Industrial Systems. Clermont-Ferrand, France. 2016
- [ACTI 23] Tran T-B, Bastidas-Arteaga E, Aoues Y, Schoefs F. Spatial Time-Dependent Reliability of Timber Structures Subjected to Decay Deterioration. 51st Esreda Seminar on Maintenance and Life Cycle Assessment of Structures and Industrial Systems. Clermont-Ferrand, France. 2016
- [ACTI 24] Bastidas-Arteaga E, Aoues Y, Chateauneuf A. Optimizing the design of timber components under decay and climate variations. In: First International Conference on Bio-based Building Materials. Clermont-Ferrand, France: RILEM; 2015.
- [ACTI 25] Diakhaté M, Bastidas-Arteaga E, Schoefs F. Probabilistic improvement of crack propagation monitoring by using acoustic emission: application to wood components. In: First International Conference on Bio-based Building Materials. Clermont-Ferrand, France: RILEM; 2015.
- [ACTI 26] Torres-Luque M, Osma JF, Sanchez-Silva M, Bastidas-Arteaga E, Schoefs F. Electrical characterization of Calcium Aluminate (CA) in presence of chloride ions. In: 14th International Congress on the Chemistry of Cement. Beijing, China; 2015.
- [ACTI 27] Bastidas-Arteaga E, Aoues Y, Chateauneuf A. Optimal design of deteriorating timber components under climate variations. In: ICASP12 – 12th International Conference on Applications of Statistics and Probability in Civil Engineering [Internet]. Vancouver, Canada: The University of British Columbia; 2015. Available from: <http://dx.doi.org/10.14288/1.0076280>
- [ACTI 28] Cárdenas Gallo I, Sánchez-Silva M, Akhavan-Tabatabaei R, Bastidas-Arteaga E. A Markov regime-switching framework application for describing El Niño Southern Oscillation (ENSO) patterns. In: ICASP12 – 12th International Conference on Applications of Statistics and Probability in Civil Engineering [Internet]. Vancouver, Canada: The University of British Columbia; 2015. Available from: <http://dx.doi.org/10.14288/1.0076152>
- [ACTI 29] El Haji B, Castanier B, Schoefs, F, Bastidas-Arteaga E, Yeung T. A condition-based maintenance policy based on a probabilistic meta-model in the case of chloride-induced corrosion. In: ICASP12 – 12th International Conference on Applications of Statistics and Probability in Civil Engineering [Internet]. Vancouver, Canada: The University of British Columbia; 2015. Available from: <http://dx.doi.org/10.14288/1.0076175>
- [ACTI 30] Tran T-B, Bastidas-Arteaga E, Bonnet S, Schoefs F. Parameter identification in chloride ingress from accelerated test using Bayesian network. In: ICASP12 – 12th International Conference on Applications of Statistics and Probability in Civil Engineering [Internet]. Vancouver, Canada: The University of British Columbia; 2015. Available from: <http://dx.doi.org/10.14288/1.0076264>
- [ACTI 31] Bastidas-Arteaga E, Stewart MG. Cost-Effectiveness of Climate Change Adaptation Strategies for Existing Coastal Reinforced Concrete Structures, in: 46th ESReDA Semin. Reliab. Assess. Life Cycle Anal. Struct. Infrastructures, Torino, Italy: 2014.
- [ACTI 32] Tran TB, Bastidas-Arteaga E, Schoefs F, Bonnet S. Bayesian updating for optimization of inspection schedules of chloride ingress into concrete, in: Proceeding 2nd Int. Symp. Uncertain. Quantif. Stoch. Model., Rouen, France: 2014.
- [ACTI 33] Rakotovoava Ravahatra N, De Larrard T, Duprat F, Bastidas-Arteaga E, Schoefs F. Sensitivity analysis of simplified models of carbonation - extension in spatial variability updating through Bayesian network, in: Proc. 2nd Int. Symp. Uncertain. Quantif. Stoch. Model., Rouen, France: 2014.
- [ACTI 34] Bastidas-Arteaga E, Stewart MG. Probabilistic Cost-Benefit Analysis of Climate Change Adaptation Strategies for New RC Structures Exposed to Chloride Ingress, in: 11th Int. Conf. Struct. Saf. Reliab., New York, USA: 2013.
- [ACTI 35] de Larrard T, Duprat F, Bastidas-Arteaga E, Schoefs F. Effects of Climate Variations and Global Warming on the Durability of RC Structures Subjected to Carbonation, in: 11th Int. Conf. Struct. Saf. Reliab., New York, USA: 2013.
- [ACTI 36] Tran TV, Schoefs F, Bastidas-Arteaga E. Risk-Based-optimization of geo-positioning of sensors in case of spatial fields of deterioration / properties, in: 11th Int. Conf. Struct. Saf. Reliab., New York, USA: 2013. 8pp.

- [ACTI 37] Bastidas-Arteaga E, Schoefs F, Bonnet S, O'Connor AJ. Bayesian identification of uncertainties in chloride ingress modeling into reinforced concrete structures. In: Third International Symposium on Life-Cycle Civil Engineering, Vienna, Austria; 2012. 8 pp.
- [ACTI 38] Tran TV, Bastidas-Arteaga E, Schoefs F, Bonnet S, O'Connor AJ, Lanata F. Structural reliability analysis of deteriorating RC bridges considering spatial variability. In: 6th International Conference on Bridge Maintenance, Safety and Management, Stresa, Italy; 2012. 8 pp.
- [ACTI 39] Tran TV, Schoefs F, Bastidas-Arteaga E, Villain G, Derobert X. Optimization of geo-positioning of sensors in case of spatial fields of deterioration/properties. In: 5th European Conference on structural control, Genoa, Italy; 2012. 11 pp.
- [ACTI 40] Schoefs F, Tran TV, Bastidas-Arteaga E, Villain G, Derobert X, O'Connor AJ, Bonnet S. Optimization of non destructive testing when assessing stationary stochastic processes: application to water and chloride content in concrete. In: ICDS12-International Conference on Durable Structures: From Construction to Rehabilitation, Lisbon, Portugal; 2012. 14 pp.
- [ACTI 41] Bastidas-Arteaga E, Schoefs F, Stewart MG. Considerations for probabilistic assessment of the effect of global warming on durability of corroding RC structures. In: 11th International Conference on Applications of Statistics and Probability in Civil Engineering, ICAPS 11, Zurich, Switzerland; 2011. p. 2102-10.
- [ACTI 42] Schoefs F, Tran TV, Bastidas-Arteaga E. Optimization of inspection and monitoring of structures in case of spatial fields of deterioration/properties. In: 11th International Conference on Applications of Statistics and Probability in Civil Engineering, ICAPS 11, Zurich, Switzerland; 2011. p. 2249-2256.
- [ACTI 43] Bastidas-Arteaga E, Schoefs F, Sánchez-Silva M. Probabilistic optimization of the management of corroding RC structures. ASCE Structures Congress, Las Vegas, USA. 2011. p. 1915-1924.
- [ACTI 44] Bastidas-Arteaga E, Nguyen MT, Schoefs F, Bonnet S. Identification bayésienne des paramètres de modélisation de la pénétration des ions chlorure dans le béton. Coastal and maritime mediterranean conference, Tanger, Maroc. 2011. p. 9-14.
- [ACTI 45] Bastidas-Arteaga E, Schoefs F. Sustainable decision-making of deteriorating structures: application to maintenance of corroding RC structures. In: Proceedings of Fifth International Forum on Engineering Decision Making (IFED), Stoos, Switzerland. 2010. 17 pp.
- [ACTI 46] Bastidas-Arteaga E, Schoefs F., Chateauneuf A. Sánchez-Silva M. (2010). Structural reliability of RC structures under the combined effect of chloride-induced corrosion, global warming and cyclic loading. 5th International AsraNet conference, Edinburgh, UK, June. 14-16, 10pp.
- [ACTI 47] Bastidas-Arteaga E, Leonel ED, Schoefs F, Attard C, Roche M. Use of image processing for structural computation updating during repair works of concrete structures. Structural Faults and Repair 2010, Edinburgh, UK, 2010. June 15-17, 7pp.
- [ACTI 48] Schoefs F, Bastidas-Arteaga E, Aury F, Vilvoisin P, Menard N. Experience feedback of repair techniques for wharves in the tidal area: the MAREO project. Structural Faults and Repair 2010, Edinburgh, UK, 2010. June 15-17, 10pp.
- [ACTI 49] Bastidas-Arteaga E, Leonel E, Schoefs F. Characterization of depth cover randomness in reinforced concrete structures: Study of its influence on the probability of corrosion initiation induced by chlorides penetration. In: Proceedings of the 2nd International Conference on Applications Heritage and Constructions in Coastal and Marine Environment MEDACHS'010, La Rochelle, France, 2010. p. 255-62.
- [ACTI 50] Schoefs F, Bastidas-Arteaga E, Capra B. Modelling and sensitivity analysis of maintenance of chloride-contaminated RC structures by cover rebuilding. In: Proceedings of the 2nd International Conference on Applications Heritage and Constructions in Coastal and Marine Environment MEDACHS'010, La Rochelle, France, 2010. p. 247-54.
- [ACTI 51] Bastidas-Arteaga E, Schoefs F, Chateauneuf A, Breyse D, Sheils E, O'Connor A. Stochastic approach for the optimization of inspection intervals of RC structures subjected to chloride penetration. In: Proceedings of the 2nd International Conference on Applications Heritage and Constructions in Coastal and Marine Environment MEDACHS'010, La Rochelle, France, 2010. p. 221-28.
- [ACTI 52] Bastidas-Arteaga E, Schoefs F, Chateauneuf A. Sustainability of maintenance strategies for RC structures subjected to chloride ingress: Experimental data and probabilistic analysis within the MAREO Project. In: Proceedings of the 2nd International Conference on Applications Heritage and Constructions in Coastal and Marine Environment MEDACHS'010, La Rochelle, France, 2010. p. 213-20.

- [ACTI 53] Bastidas-Arteaga E, Schoefs F, Chateauneuf A, Sánchez-Silva M, Capra B. Probabilistic evaluation of the sustainability of maintenance strategies for RC structures exposed to chloride ingress. In: Proceedings of Fourth International Forum on Engineering Decision Making (IFED), Long-term Policy Makings for Sustainable Society, Kanagava, Japan. 2009. 16 pp.
- [ACTI 54] Bastidas-Arteaga E, Sánchez-Silva M, Chateauneuf A, Bressolette Ph, Schoefs F. Stochastic assessment of chloride ingress into concrete matrix. In: 10th International Conference on Structural Safety and Reliability ICOSSAR, Osaka, Japan, 2009. p. 3247-54.
- [ACTI 55] Aoues Y, Bastidas-Arteaga E, Chateauneuf A. Optimal design of corroded reinforced concrete structures by using time-variant reliability analysis. In: 10th International Conference on Structural Safety and Reliability ICOSSAR, Osaka, Japan, 2009. p. 1580-87.
- [ACTI 56] Bastidas-Arteaga E, Sánchez-Silva M, Bressolette Ph, Chateauneuf A, Raphael W. Assessment of the coupled effect of corrosion-fatigue on the reliability of RC bridges. In : 4th International Conference on Bridge Maintenance, Safety and Management, IABMAS08, Seoul, Korea; 2008. 8 pp.
- [ACTI 57] El Hassan J, Bastidas-Arteaga E, Chateauneuf A, Bressolette P, El-Tawil Kh. Reliability-based assessment of environmental conditions on corrosion of RC structures subjected to chloride ingress. In: Construction Heritage in Coastal and Marine Environments Damage, Diagnostics, Maintenance and Rehabilitation, MEDACHS08, Lisbon, Portugal; 2008. p. 1302-09.
- [ACTI 58] Bastidas-Arteaga E, Sánchez-Silva M, Chateauneuf A. Structural reliability of RC structures subject to biodeterioration, corrosion and concrete cracking. In: 10th International Conference on Applications of Statistics and Probability in Civil Engineering, ICAPS 10, Tokyo, Japan; 2007. p. 183-90.

## Articles dans des conférences nationales avec comité de lecture et actes / Papers in Refereed

### National Conferences

- [ACTN 1] Amaya-Gomez R, Sanchez-Silva M, Bastidas-Arteaga E, Schoefs F, Muñoz F. Analysis of spatial dependencies of corroding pipelines based on In-line (ILI) inspections. 24ème Congrès Français de Mécanique Brest, 26 au 30 Août 2019
- [ACTN 2] Imounga M, Tran TB, Bastidas-Arteaga E, Moutou Pitti R, Ekomy Ango S, Wang XH. Identification bayésienne de l'effet de chargement statique et cyclique sur le mécanisme de pénétration des ions chlorures dans le béton. 24ème Congrès Français de Mécanique Brest, 26 au 30 Août 2019
- [ACTN 3] Nsouami V, Manfoumbi N, Bastidas-Arteaga E, Moutou Pitti R. Evolution spatiotemporelle des caractéristiques mécaniques du bois d'Ozigo en climat extérieur non abrité. 24ème Congrès Français de Mécanique Brest, 26 au 30 Août 2019
- [ACTN 4] Larrouilh N, Foucher N, Proutiere-Maulion G, Schoefs F, Sanchez M, Bastidas-Arteaga E, Lebeau J. Modulariser les formations universitaires en génie côtier pour faciliter l'accès des professionnels : le programme UN e-SEA. XVèmes Journées Nationales Génie Côtier – Génie Civil La Rochelle, 29 au 31 mai 2018 <http://dx.doi.org/10.5150/jngcgc.2018.100>
- [ACTN 5] Schoefs F, Oumouni M, Lecieux Y, Lupi C, Gaillard V, Roche M, Bastidas-Arteaga E, Follut D, Lijour P, Labégorre M. Instrumentation des structures portuaires: quelle valeur ajoutée pour la maintenance ? XVèmes Journées Nationales Génie Côtier – Génie Civil, La Rochelle, 29 au 31 mai 2018 <http://dx.doi.org/10.5150/jngcgc.2018.056>
- [ACTN 6] Rakotovao Ravahatra N, Bastidas-Arteaga E, Schoefs F, de Larrard T, Duprat F. Méthode de fenêtrage pour l'identification de la corrélation spatiale de grandeurs de durabilité du béton. 36èmes Rencontres de l'AUGC, ENISE/LTDS, Saint Etienne, 19 au 22 juin 2018
- [ACTN 7] Amaya-Gómez R, Sánchez-Silva M, Bastidas-Arteaga E, Schoefs F, Muñoz F. Pipeline degradation modeling based on a multi-hazard mechanism using ILI (In-Line) Inspections. 10èmes journées Fiabilité des Matériaux et des Structures - Bordeaux, 27-28 Mars 2018
- [ACTN 8] Rakotovao Ravahatra N, Bastidas-Arteaga E, Schoefs F, de Larrard T, Duprat F. Méthode de fenêtrage pour l'identification de la corrélation spatiale - transfert dans les modèles analytiques de carbonatation du béton. 10èmes journées Fiabilité des Matériaux et des Structures - Bordeaux, 27-28 Mars 2018
- [ACTN 9] Tran T-B, Bastidas-Arteaga E, Aoues Y, Pambou Nziengui CF, Hamdi SE, Moutou Pitti R. Approche Bayésienne pour l'évaluation et la mise à jour de la fiabilité des composants bois fissurés sous chargements mécaniques et climatiques. 10èmes journées Fiabilité des Matériaux et des Structures - Bordeaux, 27-28 Mars 2018

- [ACTN 10] Nsouami V, Manfoumbi N, Bastidas-Arteaga E, Moutou Pitti R. Diakhate M. Variabilité spatiale des contraintes et modules en compression pour des poutres de bois de Moabi du Gabon. 7èmes journées du GDR 3544 « Sciences du bois » - Cluny, 20-22 novembre 2018
- [ACTN 11] Nsouami V, Manfoumbi N, Bastidas-Arteaga E, Moutou Pitti R. Variabilité spatiale des paramètres physico-mécaniques des poutres de *Baillonella Toxisperma* en milieu tropical gabonais. Premier colloque éducation formation durabilité centres de formation public-privés. Libreville, Gabon, 29-30 mars 2018
- [ACTN 12] Avellaneda-Malagón G, Manfoumbi N, Bastidas-Arteaga E, Moutou Pitti R. Caractérisation de la variabilité spatiale des propriétés mécaniques des bois tropicaux. 6èmes journées du GDR 3544 « Sciences du bois » - Nantes, 21-23 novembre 2017
- [ACTN 13] Tran T-B, Bastidas-Arteaga E, Aoues Y, Pambou Nziengui CF, Hamdi SE, Moutou Pitti R, Fournely E, Schoefs F, Chateaneuf A. Calcul et mise à jour de la fiabilité des composants bois fissurés soumis à des sollicitations mécaniques et climatiques. 6èmes journées du GDR 3544 « Sciences du bois » - Nantes, 21-23 novembre 2017
- [ACTN 14] Rakotovao Ravahatra N, Bastidas-Arteaga E., Schoefs F., de Larrard T., Duprat F. Capacité des modèles analytiques de carbonatation à appréhender la variabilité spatiale. 35èmes Rencontres de l'AUGC, ECN/UN, Nantes, 22 au 24 mai 2017
- [ACTN 15] Creach A., Bastidas-Arteaga E, Pardo S., Mercier D. Vulnérabilité et coûts des mesures d'adaptation de logements exposés aux risques de submersion marine. 35èmes Rencontres de l'AUGC, ECN/UN, Nantes, 22 au 24 mai 2017
- [ACTN 16] Nguyen P.T., Bastidas-Arteaga E, El Soueidy C.P, Amiri O. Méta-modélisation basée sur le chaos polynomial d'un modèle multi-physique de chloration du béton pour estimer les effets du changement climatique. 35èmes Rencontres de l'AUGC, ECN/UN, Nantes, 22 au 24 mai 2017
- [ACTN 17] Manfoumbi N, Souami V, Moutou Pitti R, Bastidas-Arteaga E. Variabilité spatiale des paramètres physico-mécaniques des poutres en bois tropical soumis à un fluage de longue durée en milieu tropical naturel. 5èmes journées du GDR 3544 « Sciences du bois » - Bordeaux, 8-10 novembre 2016
- [ACTN 18] Creach A, Bastidas-Arteaga E., Pardo S., Mercier D. Comparaison du coût de différentes mesures de protection de la vie humaine face au risque de submersion marine. XIVèmes Journées Nationales Génie Côtier – Génie Civil Toulon, 29 juin au 1er juillet 2016. <http://dx.doi.org/10.5150/jngcgc.2016.070>
- [ACTN 19] Rakotovao N, Duprat F, De Larrard T, Bastidas-Arteaga E, Schoefs F. Estimation de l'aptitude des modèles d'ingénierie de carbonatation à la propagation de la variabilité spatiale. In: Journées Fiabilité des Matériaux et des Structures (JFMS) 2016. Nancy, France; 2016.
- [ACTN 20] Tran T-B, Bastidas-Arteaga E, Schoefs F, Bonnet S. Characterisation of age factor in chloride ingress model under Bayesian network framework. In: Journées Fiabilité des Matériaux et des Structures (JFMS) 2016. Nancy, France; 2016.
- [ACTN 21] Rakotovao Ravahatra N, Duprat F, De Larrard T, Bastidas-Arteaga E, Schoefs F. Méthodologie de sélection de modèles simplifiés de carbonatation du béton pour la maintenance des ouvrages. In: Rencontres Universitaires de Génie Civil [Internet]. 2015. Available from: <https://hal.archives-ouvertes.fr/hal-01167692/>
- [ACTN 22] Rakotovao Ravahatra N, De Larrard T, Duprat F, Bastidas-Arteaga E, Schoefs F. Sensibilités des modèles de carbonatation vis-à-vis de leur capacité à propager des incertitudes, in: 8èmes Journées Fiabilité Des Matériaux Des Struct., Aix-en-Provence, France: 2014.
- [ACTN 23] Tran T-B, Bastidas-Arteaga E, Bonnet S, Schoefs F. Identification bayésienne des paramètres des modèles de chloration dans le béton armé, in: 8èmes Journées Fiabilité Des Matériaux Des Struct., Aix-en-Provence, France: 2014.
- [ACTN 24] De Larrard T, Duprat F, Bastidas-Arteaga E, Schoefs F. Carbonatation sous température variable : effet du réchauffement climatique sur la fiabilité des structures en Béton Armé, in: 8èmes Journées Fiabilité Des Matériaux Des Struct., Aix-en-Provence, France: 2014.
- [ACTN 25] Bastidas-Arteaga E, Stewart MG. Climate adaptation of existing reinforced concrete structures in coastal areas, in: XIIIèmes Journées Natl. Génie Côtier -Génie Civ., Dunkerque, France: 2014.
- [ACTN 26] Tran T-B, Bastidas-Arteaga E, Schoefs F, Bonnet S. Optimal configuration for identification of parameters for chloride ingress models using Bayesian networks, in: XIIIèmes Journées Natl. Génie Côtier -Génie Civ., Dunkerque, France: 2014.

- [ACTN 27] Tran TV, Schoefs F, Bastidas-Arteaga E, Villain G, Derobert X. Optimization of Geo-positioning of NDT measurements for Modeling spatial field of defects : a two stages procedure, in: 21ème Congrès Français de Mécanique, Bordeaux, France: 2013.
- [ACTN 28] Rakotovao Ravahatra N., Bastidas-Arteaga E, Schoefs F, de Larrard T, Duprat F. Sensibilité des modèles simplifiés de chloration du béton vis-à-vis de leur capacité à propager des incertitudes, in: 21ème Congrès Français de Mécanique, Bordeaux, France: 2013.
- [ACTN 29] de Larrard T, Duprat F, Bastidas-Arteaga E, Schoefs F. Effects of climate variations and global warming on the durability of RC structures subjected to carbonation, in: Rencontres AUGC, Cachan, France: 2013. 14 pp.
- [ACTN 30] Bastidas-Arteaga E, Schoefs F, Bonnet S. Identification bayésienne des variables aléatoires pour la modélisation de la pénétration des chlorures dans les structures en béton armé. In: 7èmes Journées Nationales de Fiabilité des Matériaux et des Structures JFMS, Chambéry, France, 2012. 8 pp.
- [ACTN 31] Tran TV, Schoefs F, Bastidas-Arteaga E, Villain G, Derobert X. Optimisation de contrôles CND lors de l'auscultation d'un champ stationnaire de propriétés aléatoires. In: 7èmes Journées Nationales de Fiabilité des Matériaux et des Structures JFMS, Chambéry, France, 2012. 13 pp.
- [ACTN 32] Tran TV, Bastidas-Arteaga E, Schoefs F. Considération des champs spatiaux des propriétés du matériau dans l'optimisation de l'inspection et du contrôle des structures. In: 20ème Congrès Français de Mécanique, Besançon, France. 2011. 6 pp.
- [ACTN 33] Bastidas-Arteaga E, Schoefs F. Optimisation de la maintenance d'ouvrages en béton armé corrodés dans le cadre du développement durable. In: XXIXèmes rencontres AUGC, Tlemcen, Algérie. 2011. 8 pp.
- [ACTN 34] Aoues Y, Bastidas-Arteaga E. Conception optimale des structures en béton armé soumises à la pénétration d'ions chlorure. In: XXIXèmes rencontres AUGC, Tlemcen, Algérie. 2011. 8 pp.
- [ACTN 35] Bastidas-Arteaga E, Schoefs F, Capra B. Contribution à une gestion durable de structures en béton armé soumises à la pénétration d'ions chlorure. In: Congrès LM17 : Maîtrise des Risques et sûreté de fonctionnement, La Rochelle, France, 2010. 7 pp.
- [ACTN 36] Bastidas-Arteaga E. Sustainable management of RC structures subjected to chloride penetration. In: XXVIIIèmes rencontres AUGC, La Bourboule, France. 2010. 8 pp.
- [ACTN 37] Bastidas-Arteaga E, Schoefs F, Leonel E. Caractérisation de l'aléa de la profondeur de l'enrobage de structures en béton armé : étude de son influence sur la probabilité d'initiation de la corrosion induite par la pénétration des chlorures. In: 6èmes Journées Nationales de Fiabilité, Toulouse, France, 2010. 9 pp.
- [ACTN 38] Bastidas-Arteaga E, Schoefs F, Chateauneuf A, Breysse D, Sheils E, O'Connor A. Approche stochastique pour l'optimisation de l'inspection de structures en béton armé soumises à la pénétration des ions chlorure. In: 6èmes Journées Nationales de Fiabilité, Toulouse, France, 2010. 12 pp.
- [ACTN 39] Bastidas-Arteaga E, Schoefs F, Chateauneuf A, Bressolette Ph, Capra B. Résolution d'équations de diffusion/convection dans un cadre stochastique : application à la diffusion d'ions chlorure dans le béton. In: 19ème Congrès Français de Mécanique, Marseille, France, 2009. 7 pp.
- [ACTN 40] Bastidas-Arteaga E, Schoefs F, Chateauneuf A, Sánchez-Silva M, Capra B. Projet MAREO : Evaluation probabiliste des stratégies de maintenance durables de structures en béton armé en environnement maritime. In: XXVIIèmes rencontres AUGC, Saint-Malo, France. 2009. 16 pp.
- [ACTN 41] Bastidas-Arteaga E, Bressolette Ph, Chateauneuf A, Sánchez-Silva M. Analyse probabiliste de la durée de vie des structures en béton armé soumises à la corrosion et à la fatigue. In: XXVèmes rencontres universitaires de génie civil 2007 " Conception et vie des ouvrages ", Atelier AUGC-AFM " Approches probabilistes et fiabilistes appliquées à la durée de vie des structures ", Bordeaux, France. 2007.

### **Communications dans des conférences sans actes / Conference Papers (Without Proceedings)**

- [COM 1] Bastidas-Arteaga E. Béton armé pour les énergies marines renouvelables. Café gourmand de l'IUML, Technocampus Ocean, 17 décembre 2019
- [COM 2] Mineo-Kleiner L, Bellemare M, Bastidas-Arteaga E, Creach A, Chauveau Navarro-Carrascal O, E, Pardo S, Mahieu PA. Projet ADAPTIONS : Formulation interdisciplinaire et acceptabilité de mesures d'ADAPTation aux risques de submersiON marine dans un contexte de changement climatique. 1ères assises franco-colombiennes de l'enseignement supérieur, de la recherche et de l'innovation. Medellín, Colombie. 12-14 juin 2019.

- [COM 3] Bastidas-Arteaga E, Alam SY, Wang XH, Li Y. On the durability of concrete components for wind turbines. Oceanext Interdisciplinary Conference. Nantes, France, 3-5 July 2019.
- [COM 4] Imounga M, Tran TB, Bastidas-Arteaga E, Moutou Pitti R, Ekomy Ango S, Wang XH. Bayesian assessment of the effects of cyclic and static loads on the chloride ingress process into concrete. Oceanext Interdisciplinary Conference. Nantes, France, 3-5 July 2019.
- [COM 5] Mineo-Kleiner L, Bellemare M, Bastidas-Arteaga E, Creach A, Chauveau E, Mahieu PA, Navarro-Carrascal O, Pardo S. Reducing building's vulnerability for people to coastal flooding: technical usefulness and social perception of shelter structures. Oceanext Interdisciplinary Conference. Nantes, France, 3-5 July 2019.
- [COM 6] Creach A, Mineo-Kleiner L, Bellemare M, Bastidas-Arteaga E, Chauveau E, Mahieu PA, Navarro-Carrascal O, Pardo S. Building's vulnerability for people to coastal floods: VIE index's results for La Barre-de-Monts municipality (Vendée, France). Oceanext Interdisciplinary Conference. Nantes, France, 3-5 July 2019.
- [COM 7] Bastidas-Arteaga E. Corrosion-fatigue du béton armé pour les EMR. Journées du GeM, Saint-Jean du Monts, France, 24/05/2018
- [COM 8] Imounga HM, Bastidas-Arteaga E, Moutou Pitti R. Modélisation étendue et probabiliste du mécanisme couplé de corrosion et fatigue dans des structures en béton armé : application à des structures côtières et offshore. Journée Scientifique, Institut de Recherches Technologiques (IRT-CENAREST), Gabon 1 oct 2018
- [COM 9] Nsouami V, Manfoumbi N, Bastidas-Arteaga E, Moutou Pitti R. Fiabilité et variabilité spatiale des poutres de bois tropicales soumises à un fluage de longue durée en milieu tropical naturel. Journée Scientifique, Institut de Recherches Technologiques (IRT-CENAREST), Gabon 1 oct 2018
- [COM 10] Avellaneda-Malagon G, Nsouami V, Manfoumbi N, Bastidas-Arteaga E, Moutou Pitti R. Variabilité spatiale des caractéristiques mécaniques du *Baillonella Toxisperma* sous charge de longue durée : Application fiabiliste. 1<sup>ères</sup> Journées Sciences et Technologies du Bois: Le Gabon Face aux Nouveaux Enjeux du Développement Industriel. « La formation et la recherche, leviers essentiels pour une industrie du bois dynamique et compétitive», Libreville, 21-22 Juin 2018
- [COM 11] Rueda-Bayona G, Guzmán-Guerrero, A, Cabello, JJ, Silva-Casari RS, Bastidas-Arteaga E, Horrillo-Caraball JH. Renewables Energies in Colombia and the Opportunity for the Offshore Wind Technology. 7th International Workshop - Advances in Cleaner Production. Barranquilla, Colombia, June 21-22 2018
- [COM 12] Bastidas-Arteaga E. Maintenance solutions for ageing infrastructure. 24ID MRE (24 hours dedicated to innovation & development of Marine Renewable Energies), Nantes, France March 29-30 2018
- [COM 13] Torres-Luque M, Bastidas-Arteaga E, Schoefs F. Chlorodetec : capteur électrochimique pour le suivi de la durabilité du béton armé. les RDV du capteur, Angers, France le 14 juin 2017
- [COM 14] Nguyen P.T., Amiri O., Bastidas-Arteaga E., El Soueidy C.P., Stewart M.G., Modeling chloride transfer under climate change conditions. Contribution to reliability assessment of service life for reinforced concrete structures. "OCEANEXT multidisciplinary conference". Nantes, France, June 8-10, 2016
- [COM 15] Bastidas-Arteaga E., Schoefs F., Alami S., Assessment of climate change effects on corrosion of harbour steel structures. "OCEANEXT multidisciplinary conference". Nantes, France, June 8-10, 2016
- [COM 16] Moutou Pitti R., Tran T.B, Hamdi S.E., Bastidas-Arteaga E., Pambou Nziengui C.F., Aoues Y., Fournely E. Effets thermo-visco-hydrromécanique (TVHM) et couplage mécano-fiabiliste sur les intégrales invariantes : application aux structures bois. Club Cast3M 2016, Paris, 25 novembre 2016
- [COM 17] Tran T.B., Aoues Y., Riahi H., Hamdi S.E., Moutou Pitti R., Bastidas-Arteaga E. Updating the Reliability of cracked timber structures by using experimental results and numerical fracture model. COST ACTION FP1303 Workshop: Design, Application and Aesthetics of Biobased building materials Sofia, Bulgaria 28/2 – 01/03/2016
- [COM 18] Aoues Y, Bastidas-Arteaga E, Moutou Pitti R, Chauteuneuf A. Reliability-Based Design Optimisation of timber trusses subjected to decay and climate variations. In: COST ACTION FP1303 [Internet]. Tallinn, Estonia; 2015. Available from: <http://dx.doi.org/10.13140/2.1.4252.3687>
- [COM 19] Bastidas-Arteaga E. Climate Change Impacts and Adaptation for Reinforced Concrete Structures Subjected to Chloride Ingress. In: ACI Kansas Meeting 2015. Kansas City, USA: ACI; 2015.
- [COM 20] Hamdi SE, Diakhaté M, Bastidas-Arteaga E, Moutou Pitti R. Crack propagation monitoring in wood materials: acoustic emission pattern recognition approach based on Hilbert-Huang transform. In: 8th European Conference on Wood Modification. Finland; 2015.

- [COM 21] Diakhaté M, Hamdi SE, Bastidas-Arteaga E, Moutou Pitti R. Contribution de l'émission acoustique et de la PoD au suivi de la propagation de la pointe de fissure dans le bois. In: 4èmes journées du GDR 3544 « Sciences du bois » [Internet]. Clermont-Ferrand, France; 2015. Available from: <http://dx.doi.org/10.13140/RG.2.1.2169.6724>
- [COM 22] Bastidas-Arteaga E. Adaptation des ouvrages côtiers en béton armé face au changement climatique : application à structures existantes en France, in: Les Escaltes de Génie Civil, Saint-Nazaire, France: 2014.
- [COM 23] Bastidas-Arteaga E. Evaluation de risques et adaptation climatique d'ouvrages côtiers en béton armé : application à structures existantes en France, in: Séminaire changement climatique (Université Nantes), Nantes, France: 2014.
- [COM 24] Moutou Pitti R, Diakhate M, Bastidas-Arteaga E, Aoues Y, Angellier N, Riahi H, et al. Use of acoustic emission tool to evaluate wood mechanical behavior, in: Wood Music. 2014, Musée de la musique, Paris, France: COST Action FP1302, 2014.
- [COM 25] Torres-Luque M, Osma-Cruz J, Sánchez-Silva M, Bastidas-Arteaga E, Schoefs F. Influence of chloride content on dielectric behavior of CA, in: Materials Science & Technology, Montreal, Canada: 2013.
- [COM 26] Bastidas-Arteaga E, Stewart MG, Schoefs F. Probabilistic cost-benefit analysis of adaptation measures for existing RC structures subjected to chloride ingress and climate change, in: Seventh IFED Forum: Decision-Making for Uncertain Futures in a Changing Climate, Shoal Bay, Australia: 2013.
- [COM 27] Moutou Pitti R, Malick D, Bastidas-Arteaga E, Aoues Y, Angellier N. ANR JJC2013 – Projet CLIMBOIS : Impact des variations climatiques et mécaniques sur la durabilité des constructions bois, in: 2èmes Journées Sci. du GDR Sci. du Bois, Champs sur Marne, France: 2013.
- [COM 28] Bastidas-Arteaga E. Modélisation des mécanismes de dégradation des structures en environnement aléatoire : application aux structures en béton armé face au changement climatique, in: Journée Modélisation UFR Sci. Tech. (Université Nantes), Nantes, France: 2013.
- [COM 29] Bastidas-Arteaga E. Evaluation probabiliste de l'influence du climat et du changement climatique sur la durabilité des ouvrages en béton armé en ambiance marine, in: Journées Thématiques GdR MeGe : Pérennité des formations naturelles et des ouvrages dans leur environnement, Saint-Nazaire, France: 2013.
- [COM 30] Bastidas-Arteaga E, Stewart MG, Schoefs F, Dravitzki S, Wang X. Cost-effectiveness of Climate Change Adaptation Strategies for RC Structures Exposed to Chloride Ingress: Application to Existing Structures in France, in: 1st Eur. Clim. Chang. Adapt. Conf., Hamburg, Germany: 2013.
- [COM 31] Tran TV, Schoefs F, Bastidas-Arteaga E, Villain G, Derobert X, Idier J. Optimisation du positionnement de capteurs sur des structures à forte variabilité spatiale. In: Journée Scientifique SHM, l'instrumentation au service du suivi des structures, Nantes, France. 2012.
- [COM 32] Tran TV, Schoefs F, Bastidas-Arteaga E, Villain G, Derobert X, Idier J. Optimization of NDT measurements for structural reliability assessment in case of spatial variability. In: International Workshop in Non Destructive Testing and Evaluation: Physics, Sensors, Materials and Information, Nantes, France. 2011.
- [COM 33] Bastidas-Arteaga E, Schoefs F. Maintenance et outils d'aide à la décision dans un contexte de développement durable. 6ème Séminaire Transnational DuratiNet. Nantes, France. 2011.
- [COM 34] Bastidas-Arteaga E, Barbot L, Schoefs F. Projets FUI et européens de gestion des infrastructures portuaires: MAREO et MEDACHS. In: Colloque : Mer agitée, mer à gérer. Vers un aménagement de l'espace maritime. Journées Scientifiques de l'Université de Nantes, Nantes, France, Juin 2010.
- [COM 35] Bastidas-Arteaga E, Schoefs F, Bonnet S, Salta M. Prise en compte de l'erreur de mesure dans l'optimisation de l'auscultation de structures vieillissantes. Colloque : ECND-PdL : un exemple de projet collaboratif en Pays de Loire. Journées Scientifiques de l'Université de Nantes, Nantes, France, Juin 2010.

## Articles pour le grand public / Dissemination papers

- [AGP 1] Schoefs F., Bastidas-Arteaga E., Barbot L., (2011). Ixead, l'Université à la Rencontre du Public, propos recueillis par C. Bailly, article invité dans le dossier spécial « IMGC », de la Revue *Béton[s]*, N°37, p. 74, Novembre-Décembre 2011.
- [AGP 2] Schoefs F., Bastidas-Arteaga E., (2011). Des prévisions en béton. article invité dans le dossier « Une ville habitable », de la Revue *Têtes Chercheuses* actualités et culture des sciences en pays de la Loire, N°20, p. 8, Hiver 2011-2012.

- [AGP 3] Schoefs F, Bastidas-Arteaga E, Barbot L (2011). Projet MAREO : Evaluation probabiliste de la dégradation et des stratégies de maintenance durables de structures en béton armé en environnement maritime. *Essais & Simulations* 2011;107:24-32.
- [AGP 4] Cailleau A., Schoefs F., Bastidas-Arteaga E., (2011). "Des prévisions en béton", article invité dans le dossier «Une ville durable», de la Revue Têtes Chercheuses, revue trimestrielle gratuite d'Actualité et Culture des Sciences en Pays de la Loire, N°20, p. 8, Hivers 2011-2012.