CATHERINE DE WOLF

catherine.dewolf@epfl.ch
Avenue des Sittelles 91, 1150 Brussels, Belgium
Languages: French, Dutch (Native), English (Fluent)

EDUCATION

2014 – 2017 **PhD in Architecture: Building Technology – Massachusetts Institute of Technology (MIT)**, *Boston (US)*
Department of Architecture, *Defended April 11, 2017*
- *Dissertation*: Low-carbon pathways for structural design: embodied life cycle impacts of building structures
- *Supervisor*: Prof. John Ochsendorf

2012 – 2014 **Master of Science in Building Technology – MIT**, *Boston (US)*
Department of Architecture, June 2014, GPA 5.0/5.0
- *Thesis*: Material quantities in building structures and their environmental impact
- *Supervisor*: Prof. John Ochsendorf

2007 – 2012 **Double degree Civil Engineering & Architecture – Vrije Universiteit Brussel (VUB) & Université Libre de Bruxelles (ULB)**, *Brussels (BE)*
Master & Bachelor of Science, Highest Honours
- *Thesis*: Life Cycle Design – How can interactions between buildings, components and materials support design for re-use through sustainable material management?
- *Supervisor*: Prof. Niels De Temmerman

RESEARCH EXPERIENCE

2017 – current **Postdoc – École Polytechnique Fédérale de Lausanne (EPFL)**, *Fribourg (CH)*
Circular economy, Structural Xploration Lab (SXL), smart living lab with Prof. C. Fivet

2018 – current **Helpdesk – Joint Research Centre (JRC) of the European Commission**, *Sevilla (ES)*
Level(s) EU framework with N. Dodd, M. Cordella & S. Donatello

2016 **Research Assistant – University of Cambridge**, *Cambridge (UK)*
Implementing whole life carbon in buildings with Prof. P. Guthrie & Dr. A. Moncaster

2013 & 2015 **Research Assistant – MIT, KISR & Kuwait University**, *Boston (US) and Kuwait City (KU)*
Sustainability of the Built Environment in Kuwait with Prof. O. Buyukozturk

2015 **Researcher – MIT & Stellenbosch University**, *Boston (US) and Stellenbosh (SA)*
Material flows of African Cities workshop with Prof. J. Fernandez

2013 & 2014 **Visiting Researcher – Arup**, *San Francsico (US) and London (UK)*
Structures with F. Yang, Materials with A. Charlson & K. Steele

2011 **Researcher – University of Cambridge**, *Cambridge (UK)*
European Summer School on Construction History with B. Espion

OTHER PROFESSIONAL EXPERIENCE

2015 – current **Columnist – architectura.be,** *Hasselt (BE)*
Column writing and interviews for architecture magazine with R. Neven

2015 **Consultant Engineer – Helionix Designs,** *St Margarets Bay (UK)*
Carbon assessment of Helionix buildings with M. Carey

2014 **Engineer – Ney & Partners,** *Brussels (BE)*
Environmental impact assessment of bridges with K. Verbeeck

2011 **Architectural Intern – Modulo Architects,** *Brussels (BE)*
Architectural design with O. Adam, O. Barré and P. Spruytte

2009 & 2010 **CAD Designer – Royal Institute of Natural Sciences,** *Brussels (BE)*
CAD drawing with building managers and safety surveyors, with G. CLaes

TEACHING EXPERIENCE

Instructor

2018 • "Building Design in the Circular Economy" – *School of Architecture, Civil and Environmental Engineering (ENAC)*, EPFL, with Prof. C. Fivet, 18h
2018 • "Interactive structural design" – *School of Architecture and Urban Planning, Nanjing University*, 17h
2018 • "Life Cycle Assessment" – *ENAC, EPFL*, 2h
2015 – 2017 • "Environmental Impacts of Buildings" – *Master Environmental Management, Université du Littoral*, 18h

Invited Lecturer

2017 • *Seminars MSc/PhD*: Stanford with Prof. M. Lepech, ETH Zurich with Prof. P. Block, MIT with Prof. C. Mueller
2015 & 2017 • *Classes MSc/BSc*: CalPoly with Prof. E. Saliklis, Berkeley with Prof. A. Horvath, MIT with Prof. C. Mueller

2013 – 2018 **Invited Design Studio Jury Member**

Spring 2018 • *Class:* Constructive Second-Hand ENAC week – *Instructor:* Prof. Corentin Fivet, EPFL
Fall 2015 • *Class*: Architecture Design Option Studio – *Instructor:* Prof. Alexander D'Hooghe, MIT
Fall 2014 • *Class*: Arch. Design Core 3 Studio – *Instructors:* Prof. Sheila Kennedy, Prof. Caitlin Mueller, MIT
Fall 2013 • *Class*: Building Structural Systems II – *Instructor:* Prof. John Ochsendorf, MIT

Teaching Assistant, MIT

2016 • Analysis of Historic Structures, with Prof. J. Ochsendorf
2013 • Building Structures II (Structures & Envelope Design), with Prof. J. Ochsendorf and Andrea Love

SUPERVISION OF JUNIOR RESEARCHERS

Supervisor at PhD level

2018 – 2018 • *Research Assistant*: T. Hegarty "Build-Unbuild-Repeat: reuse of façade elements" – EPFL

Supervisor at Master level (Thesis, Project, Design)

2018 – 2018 • *Research Assistant*: F. Broginni and L. Sironi "Habitat 4D-Time machine" – EPFL
2017 – 2018 • *Master Design Project*: E. Mermillod, "Reuse of nuclear plants" – EPFL with V. Kaufmann, B. Cache
2017 – 2018 • *Master Design Project*: F. Salmona, "Architecture for contemporary musical performance" – EPFL with C. Fivet, P. Tombesi
2014 – 2015 • *Master of Engineering Thesis*: R. Bianquis, "Assessment Methodology for Environmental Impact of Bridges" – MIT with J. Ochsendorf
2015 • *Master Work*: V. Goswein – International Design Center and Building Technology, MIT with J. Fernández

Supervisor at Bachelor level

2018 – 2018 • *Research Assistant:* B. Vallance "Defining circular economy in architecture" – EPFL
2015 –2016 • *Undergraduate Research Opportunities Program (UROP):* W.K. Lau, "Tall and slender buildings" – MIT
2014–2014 • *UROP:* J. Hogroian, "Comparing carbon in case studies" and "Material quantities in stadia" – MIT
2014–2014 • *UROP:* T. Hagerty, "Theoretical material quantities in low-rise concrete buildings" – MIT
2013– 2014 • *U ROP: E.* Pence "Development of interactive, relational databases" – MIT
2013– 2013 • *UROP:* I. Tegene, "Material quantities in concrete frame buildings" – MIT
2013– 2013 • *UROP:* C. Chern, "Defining the carbon footprint of materials" – MIT

SERVICES

Leadership in research projects

2017 – current • *REthinking Sustainability TOwards a Regenerative Economy (RESTORE):* Working Group Subleader
2018 – 2018 • *Short Term Scientific Mission at TRANSFORM lab* on reuse in buildings: RESTORE Fund
2018 – 2018 • *4D-Time machine at EPFL* on mapping Geneva's embodied carbon legacy: HABITAT Fund
2018 – 2018 • *Build Unbuild Repeat (BUR) phase 2: The Envelope*: Smart living lab Fund
2016 – current • *Structural Engineers 2050 Commitment:* Structural Engineers Institute (SEI) Futures Fund

Organisation of conferences

2016 • *Embodied Carbon Academia-Industry Symposium – Cambridge University:* Co-leading the symposium
2013– 2016 • *President – Harvard & MIT Belgian Society:* Co-organizing talks of scientists, CEO's & politicians
2014 • *Edward and Mary Allen Lecture in Structural Design – MIT:* Edited booklet on S. Velez talk
2011 – 2012 • *Vice president – Board of European Students of Technology:* Summer school on lightweight structures
2011 • *Risk analysis in high-rise buildings conference – ULB:* Co-organizing and co-editing proceedings
2015 • *Workshop embodied carbon – Thornton Tomasetti and Weidlinger:* Organizing industry workshop

Memberships

2016 – current • *Carbon Leadership Forum,* board member, co-founder Structural Engineers 2050 Commitment
2016 – current • *Innovators under 35 Belgium,* alumni panel member, reviewing new candidates for the awards
2017 – current • *Green MIND University,* member
2016 – current • *International Society for Industrial Ecology (ISIE),* member
2014 – current • *International Association for Shell and Spatial Structures (IASS*), member

Scientific committees

2018 – current • *Sustainable Built Environment (SBE)* conference, supported by CIB and UNEP
2018 – 2018 • *IASS*: co-chair "Environmentally compatible structures" session
2016 – 2017 • *International Symposium on Sustainable Systems and Technology (ISSST)* for ISIE

Journal, book & report reviewer

2018 • *International Energy Agency (IEA) Clean energy pathways report:* reviewer
2018 • *Scientific Data Journal* for Nature: reviewer
2016 – 2017 • *Energy Efficiency Journal* for Proceedings of Institution of Civil Engineering (ICE): reviewer
2016 – 2017 • "*Embodied carbon in Buildings*" Springer book, co-editor and co-author
2015 – 2016 • *Engineering Sustainability Journal* for Proceedings of ICE: reviewer
2010 – 2010 • "*Risk Analysis in High-Rise Buildings*" ULB book, co-editor

PRIZES, AWARDS, FELLOWSHIPS

2018 – 2023 • Qualification maître de conference, aptitude certification to be civil engineering professor (FR)
2017 – 2019 • Marie Sklodowka-Curie Fellowship of the European Commission (CH)
2017 – 2018 • Swiss Government Excellence Scholarship (CH)
2015 – 2017 • World Excellence Fellowship Wallonie-Bruxelles International (BE)
2014 – 2015 • MIT Presidential Fellowship US)
2012 – 2013 • Belgian American Education Foundation (BE-US)
2012 – 2013 • Gustave Boël – Sofina Fellowship (BE-US)
2016 • Hangai Prize of the IASS (JP)
2015 • Innovators under 35 Belgium (BE)
2014 • Harold Horowitz (US)
2014 • Young Researcher Award at Sustainable Structures Symposium (US)
2012 • Horta award of excellence (BE)

PUBLICATIONS

Journal publications

2018 Smart and Sustainable Built Environment

Rodriguez, B.X., Simonen, K., Huang, M., **De Wolf, C.**, "A taxonomy for Whole Building Life Cycle Assessment (WBLCA)," *Smart and Sustainable Built Environment*, 2018 (accepted).

2018 Special Issue of Energy and Buildings

Pomponi, F., Moncaster, A., **De Wolf, C.**, "Furthering embodied carbon assessment in practice: results of an industry-academia collaborative research project," *Special Issue of Energy and Buildings on Embodied Energy and Carbon Efficiency*, 2018.

2018 Journal of Cleaner Production

Kupwade-Patil, K., **De Wolf, C.**, Chin, S., Ochsendorf, J., Büyüköztürk, O., "Impact of Embodied Energy on materials/buildings with partial replacement of ordinary Portland Cement by natural Pozzolanic Volcanic Ash," *Journal of Cleaner Production*, Vol. 177, 2017, 547-554, DOI: 10.1016/j.jclepro.2017.12.234.

2017 Journal of Technology | Architecture + Design (TAD)

Simonen, K., Rodriguez, B.X., **De Wolf, C**., "Benchmarking the Embodied Carbon of Buildings," *TAD*, Vol. 1, Issue 2, 2017, 88-98.

2017 Energy

De Wolf, C., Cerezo, C., Murthadhawi, Z., Hajiah, A., Al Mumin, A., Ochsendorf, J., Reinhart C., "Life cycle building impact of a Middle Eastern residential neighbourhood," *Energy*, Vol. 134, 2017, 336-348, DOI: 10.1016/j.energy.2017.06.026.

2017 Energy and Buildings

De Wolf, C., Pomponi, F., Moncaster, A., "Measuring embodied carbon of buildings; a review and critique of current industry practice," *Energy and Buildings*, Vol. 140, No. 1 April 2017, 68-80, DOI: 10.1016/j.enbuild.2017.01.075.

2016 Journal of the International Association for Shell and Spatial Structures (IASS)
De Wolf, C., Ramage, M., Ochsendorf, J., "Low Carbon Vaulted Masonry Structures," *Journal of the IASS*, Vol. 57, No. 4, December n. 190, 2016, 275-284.

2015 Institution of Civil Engineers (ICE) Engineering Sustainability
De Wolf, C., Yang, F., Cox, D., Charlson, A., Hattan, A., Ochsendorf, J., "Material quantities and embodied carbon dioxide in structures," *ICE Journal of Engineering Sustainability*, Vol. 169, Issue ES4, 2015, 150-161, DOI: 10.1680/ensu.15.00033.

2014 Invited Paper – The Structural Engineer
De Wolf, C., Ochsendorf, J., "Participating in an Embodied Carbon Database," *The Structural Engineer*, February Issue, 2014, pp. 30-31.

Conference publications

2019 Sustainable Built Environment (SBE) Graz
De Wolf, C., Hoxha, E., Fivet, C. (2019) "Embodied carbon assessment of reuse." *SBE19*, Graz, AT, September 11-14, 2019 (in preparation).

2019 Sustainable Built Environment (SBE) BAMB-CIRCPATH
Brütting, J., **De Wolf, C.**, Fivet, C. (2019) "Design of Open-Ended Load-Bearing Systems for Effective Downstream Reuse." *Buildings As Material Banks (BAMB) – A Pathway for a Circular Future, SBE19*, Brussels, BE, February 5-7, 2019 (accepted).

2019 International Conference on Structure and Architecture (ICSA) Lisbon
De Wolf, C., Fivet, C., "Tall Timber as Zero Carbon Structural Design," *ICSA*, Lisbon, PT, July 24-26, 2019 (accepted).

2018 Passive and Low Energy Architecture (PLEA) Hong Kong
De Wolf, C., Brütting J., Fivet, C., "Embodied Carbon Benefits of Reusing Structural Components in the Built Environment: a Medium-rise Office Building Case Study," *PLEA*, Hong Kong, CN, December 10-12, 2018.

2018 International Symposium on Life-Cycle Civil Engineering (IALCCE) Ghent
De Wolf, C., Davies, D., "Benchmarking embodied carbon in structural materials," *IALCCE*, Ghent, BE, October 28-31, 2018.

2018 IASS Boston
Stern, B., Mueller, C., **De Wolf, C.**, "Minimizing Embodied Carbon in Multi-Material Structural Optimization of Planar Trusses," *Proceedings of the IASS*, Boston, US, July 16-20, 2018.

2018 IASS Boston
De Wolf, C., "Low Carbon Pathways for Structural Design," *Proceedings of the IASS*, Boston, US, July 16-20, 2018.

2016 IASS Tokyo
De Wolf, C., Ramage, M., Ochsendorf, J., "Low Carbon Vaulted Masonry Structures," *Proceedings of the IASS*, Tokyo, JP, September 26-30, 2016.

2016 Sustainable Built Environment (SBE) Zurich
De Wolf, C., Bird, K., Ochsendorf, J., "Material quantities and embodied carbon in exemplary low-carbon case studies," *SBE Zurich*, Zurich, CH, June 13-17, 2016.

2015 IABSE Geneva
De Wolf, C., Verbeeck, K., Ochsendorf, J., "The environmental impact of bridges," *IABSE Geneva*, Geneva, CH, September 23-25, 2015.

2015 IASS Amsterdam
Iuorio, O., **De Wolf, C.**, Ochsendorf, J., "Embodied carbon of long span roofs," *Proceedings of the IASS*, Amsterdam, NL, August 17-20, 2015.

2014 IASS Brasilia
De Wolf, C., Hogroian, J., Ochsendorf, J., "Comparing material quantities and embodied carbon in stadia," *Proceedings of the IASS*, Brasilia, BR, September 17, 2014.

2014 Sustainable Structures Symposium Portland
De Wolf, C., Iuorio, O., Ochsendorf, J., "Structural Material Quantities and Embodied Carbon Coefficients: Challenges and Opportunities," *Proceedings of the Sustainable Structures Symposium*, Corey Griffin (ed.), Portland State University, Portland, US, April 18, 2014.

Books

2018 Embodied Carbon in Buildings: Measurement, Management, and Mitigation

De Wolf, C., Simonen, K., Ochsendorf, J., "Initiatives to Report and Reduce Embodied Carbon in Buildings in North America" in: Pomponi, F., **De Wolf, C.**, Moncaster, A. (ed.), Embodied Carbon in Buildings: Measurement, Management, and Mitigation, *Springer*, Berlin, Germany, 2018

2017 New Carbon Architecture

De Wolf, C., Droguett, B.R., Simonen, K., "Counting Carbon – What We Know and How We Know It" King, B. (ed.), New Carbon Architecture, *New Society Publishers*, Canada, 2017

2011 Analysis of Global Risk in High Rise Buildings

Rammer, Y., Dechamps, Y., **De Wolf, C.** (ed.), *VUB, ULB, Association des Entrepreneur Belges*, Brussels, Belgium, April 30, 2011, 302p.

General press

Selected interviews on circular economy (Dutch and French) for Architectura.be

2018 Rotor deconstruction

Selected Bilingual columns (Dutch and French) for Architectura.be

2017 For the reuse in construction
2017 Tall timber structures
2016 Life cycle assessment
2016 Databases and methods for the environmental impact of buildings
2016 Why do architects compute the environmental impact of construction materials?
2016 Cradle to Grave
2016 What happens to stadiums after the Games?
2015 Learning sustainable design while traveling
2015 Learning engineering in a history book

Other artefacts with documented use

2018 Habitat 4D-maps of Geneva's embodied carbon legacy

Produced maps on the construction, demolition, and material use history of Geneva

2018 Joint Research Centre (JRC) at the European Commission

Webinar "Level(S): a common EU-framework for whole life Global Warming Potential"

2017 Database of embodied Quantity outputs (deQo)

Created and developed a database on material quantities and embodied carbon in building structures, collected over 500 projects, available at deqo.mit.edu

2017 Joint Research Centre (JRC) at the European Commission

Contributed to "Evidence for the potential for structural design optimisation to reduce material mass" report for the European Union

PRESENTATIONS

Oral contributions to conferences

2018 IALCCE Ghent

"Benchmarking embodied carbon in structural materials," *IALCCE*, Ghent, BE, October 29, 2018

2018 IASS Boston

"Low Carbon Pathways for Structural Design" – Plenary Session, *MIT*, Boston, US, July 18, 2018

2018 Greenbuild Europe

"Life Cycle Assessment as a Tool for Design" – *Industry workshop at Greenbuild*, with Havinga, L., Peretti, G., Naboni, E., Berlin, DE, April 18, 2018

2016 IASS Tokyo • ***Hangai Prize***

"Low Carbon Vaulted Masonry Structures" – Plenary Talk, *Tokyo University*, Tokyo, JP, Sept. 30, 2016

2016 Embodied Carbon Academia-Industry Symposium – University of Cambridge

"Implementing whole life embodied carbon in buildings," Cambridge, UK, April 11, 2016.

2016 International Society for Industrial Ecology (ISIE) Americas

"Implementing Whole Life Embodied Carbon in Buildings" – *Universidad de Los Andes*, Bogota, CO, 24-27 May 2016

2016 Sustainable Built Environment (SBE) Zurich
"Material quantities and embodied carbon in exemplary low-carbon case studies," *SBE Zurich*, Zurich, CH, June 13-17, 2016

2015 ISIE, Taking Stock of Industrial Ecology, University of Surrey
"Retrofit Rethink: Material Flows for Housing in African Cities" – *University of Surrey*, Guildford, UK, 7-10 July 2015, with C. Loggia

2015 Contour École Polytechnique Fédérale de Lausanne (EPFL)
"Material flows and embodied carbon of residential buildings in African Cities," with Goswein, V., *Contour EPFL - Agency/Agents of Urbanity*, Lausanne, CH, June 1, 2015

2015 Infrastructure Innovation in a Changing Environment Conference (2 posters)
- Hogroian, J., De Wolf, C., Ochsendorf, J., "Comparing material quantities and embodied carbon in stadia," MIT, US, November 20, 2015.
- Cin, S., Kupwade-Patil, K., De Wolf, C., Büyükoztürk, O., Ochsendorf, J., "Embodied carbon emissions for partial replacement of Ordinary Portland Cement (OPC) with natural pozzolanic volcanic ash," MIT, US, November 20, 2015.

2014 IASS Brasilia
"Comparing material quantities and embodied carbon in stadia." – *Ulysses Guimarães Convention Center*, Brasilia, BR, 15-19 Sept. 2014

2014 Sustainable Structures Symposium, Portland State University • ***Young Researcher Award***
"Material Quantities and Embodied Carbon Coefficients: Challenges and Opportunities" – *Portland State University*, Portland, US, April 18, 2014

2014 Structures Congress
"Survey of Material Quantities and Embodied Carbon of buildings structures," with Yang, F., *Structures Congress,* Boston, USA, April 4, 2014

Industry workshops and professional presentations

2018 Planet Week – MVRDV
"Circular Low-carbon Design" – Industry workshop at architecture office MVRDV, Rotterdam, NL, Oct. 2, 2018.

2016 Embodied Carbon and Energy Symposium, University of Cambridge
"Implementing Whole Life Embodied Carbon in Buildings" – *University of Cambridge*, Cambridge, UK, 11 April, 2016, presenting and co-organizing symposium with industry practitioners

2015 Workshop embodied carbon at Thornton Tomasetti and Weidlinger
"Workshop on calculating embodied carbon in buildings" – *New York City office*, Oct. 8, 2015

2014 Professional presentation at Ney & Partners
"The environmental impact of bridges" – *Ney & Partners*, Brussels, BE, Aug. 21, 2014

2014 Professional presentation at SOM
"Evaluating embodied carbon in building structures" – *SOM*, Chicago, US, May 12, 2014

2014 PechaKucha for the embodied carbon week at Arup
"Embodied Carbon. What is your priority?" – London, UK, April 7, 2014

2013 Professional presentation at Arup
"Embodied carbon: meeting of the minds and collaboration opportunities" – *MIT, Arup, SOM, Webcor,* San Francisco, US, July 10, 2013, presenting with F. Yang, D. Shook and P. Williams

Governmental presentations

2018 Swiss Resources Forum
"Future cities in a circular economy" – *World Resources Forum, Swiss Federal Laboratories for Materials Science and Technology (EMPA)*, Dübendorf, CH, Oct. 25, 2018

2018 Europe Climate Foundation
"Optimization in Structures Scenario" – *Europe Climate Foundation*, Brussels, BE, May 23, 2018

2018 Joint Research Centre of the European Commission
"Low Carbon Design" – *JRC Centre European Commission*, Sevilla, ES, March 27, 2018

2018 International Energy Agency (IEA)
"Efficient use of materials in building design" – *IEA Experts' Dialogue on Materials trends in Buildings Construction*, Paris, FR, March 9, 2018

2017 Joint Research Centre of the European Commission
"Benchmarking embodied carbon in buildings" – *JRC Centre European Commission*, Ispra, IT, Dec. 18, 2017

2016 Emerging Leaders Conference at European Parliament
"Environmental buildings" – *European Parliament*, Brussels, BE, Nov. 28, 2016

Academic presentations

2017 Stanford University
"Low Carbon Pathways for Structural Design" – Seminar, *Stanford*, Palo Alto, US, November 1, 2017 invited by Prof. Michael Lepech

2017 Swiss Federal Institute of Technology (ETH) Zurich
"Low Carbon Structural Design" – NCCR Lecture, *ETH Zurich*, Zurich, CH, October 23, 2017 invited by Prof. Philippe Block

2017 Carbon Footprint and LCA Seminar at EURAC Research
"Whole life cycle embodied carbon in building structures" – *RESTORE*, Bolzano, IT, July 25, 2017

2017 Politecnico di Milano
"Carbon footprint of the built environment" –OPENTalks, *PoliMi*, Milan, IT, July 24, 2017

2017 Imperial College London
"The impact of buildings" – Structures Seminar, *Imperial College London*, London, UK, Feb. 1, 2017

2015 Integrated Design Architecture and Sustainability (IDEAS) talk, EPFL
"Low carbon pathways for structural design" – *EPFL*, Lausanne, CH, June 1, 2015

Invited classes

2017 *Class*: Technologies for Sustainable Societies – Civil Engineering, University of California Berkeley, *Instructor*: Prof. Arpad Horvath

2017 *Class*: Environmental Structures – California Polytechnic State University (CalPoly), *Instructor*: Prof. Edmond Saliklis

2016 *Class:* Building Structural Systems II – MIT, *Instructor*: Prof. Caitlin Mueller

2015 *Class:* Modeling and Analysis of Structures – MIT, *Instructor*: Prof. Corentin Fivet

2014 *Class:* Civil and Environmental Engineering Design – MIT, *Instructor*: Prof. Caitlin Mueller

General audience presentations

2018 Smart living lunch, CH
"Low carbon structural design" – *smart living lunch, smart living lab*, February 6, 2018

2017 Green MIND University, BE
"Low carbon pathways for structural design" – *Greenfish, WBI, Tweed, Greenwin*, May 10, 2017

2015 Innovators under 35, BE • ***Innovators under 35 Belgium Award***
"Pitch for low embodied carbon design tool" – *Innovators Under 35 Belgium*, May 20, 2015

2015 TEDx talk at Panthéon-Sorbonne, FR
"Les nouveaux matériaux (new materials)" – *Technology-Entertainment-Design (TEDx) talk*, May 16, 2015

VOLUNTEERING and SKILLS

Volunteering
- *Fundación Trazando Espacios Públicos*, Construction, Venezuela (2017)
- *Women in Science and Engineering (WiSE)*, Teaching, MIT (2013)
- *Local Economic Development*, Centre for Real Estate & University of KwaZulu Natal, South Africa (2013)
- *Private tutoring:* Tutor in Mathematics, Sciences, French, Piano

IT Autodesk, Rhinoceros, Adobe, Office, MATLAB, website coding

Arts Theatre (Apostrophes), Piano (Conservatory of Fribourg)