
Short Curriculum Vitae

Name: **Milan Veljkovic**
Born: 27 June 1959, Sarajevo, Bosnia and Hercegovina
Nationality: Swedish
Civil status: Married since 1985, two children born 1987 and 1994
Address at work: Faculty of Civil Engineering and Geosciences
Delft University of Technology
Stevinweg 1, room 2.52 (Stevin II)
2600 GA Delft, The Netherlands
Address at home: Molenmeesterstraat 21
2645 MB, Delfgauw, The Netherlands

Education:

- Graduated civil engineer, 4.5 year graduate studies.
University in Sarajevo, Bosnia and Hercegovina 1978-1983
- Postgraduate study , two years M.Sc studies,
Universitetet in Zagreb, Croatia 1985-1988
- PhD study, Luleå University of Technology, Sweden 1991-1996
- Docent in Steel Structures, Luleå University of Technology 2003
- Professor of Steel Structure 2007

Employment:

- Assistant of Professor, University in Sarajevo 1985-1991
- Research Engineer, Institute for Structures and Materials,
University in Sarajevo 1987-1990
- Research Engineer, Luleå University of Technology 1991-1993
- PhD student, Luleå University of Technology 1994-1996
- Lecturer, Luleå University of Technology 1997-2003
- Senior Lecturer, Luleå University of Technology 2003-2007
- Chair Professor, Luleå University of Technology 2007-2015
- Chair Professor, Delft University of Technology 2015-

Positions at Luleå University of Technology

- Member of the board of Civil Engineering Department 2000-2002
- Director of a research school 2003-2005
Innovative technology and management,
- Director of Centre for Risk analysis and Risk Management 2005-2015
- Director of Program for Fire Protection Engineers 2005-2014
- Manager of Steel Structure Research Group 2005-2015

Positions at Delft University of Technology

- Member of Board of Department of Structural Engineering 2015-2017
- Member of Board of Department Engineering Structures 2018-

Academic, Scientific and Technical Committees

- ECCS TWG7.6 Design for composite construction with cold formed steel members, member 1994-1997
- ECCS TC 10, Structural connections, member since 2003
- ESTEP, European Steel Technological Platform, WG3 Construction member since 2006
- ECCS, [European Convention of Constructional Steelwork](#)
vice-chairman of Technical Management Board 2009-2013
chairman of Technical Management Board since 2013
ECCS, Management Working Group since 2009
- JVTC, [Luleå Railway Research Center](#)
Member of the board 2012-2015
- SBI, [The Swedish Institute of Steel Construction](#)
Member of the board (substitute) 2007-2015
- Member of Swedish Technical Committee for Standardisation, TK188 and TK203;
- Member of European Standardization committee CEN250/SC3 Steel Structures;
Standardization committee CEN250/SC4 Composite Structures,
- Chairman of Project Team for the development of the 2nd generation of Eurocodes, Part EN1993-1-8 2015-2018

Engagement in recent International Projects, selection

Coordinator of following projects:

1. **AEOLUS4FUTURE**, H2020-MSCA-ITN-2014, **Innovative Training Networks (ITN)**, Marie Skłodowska-Curie Actions, 2015-2019
Total Budget 3,8 mil Euro, left in October 2015 because of move to TUD
2. **HISTWIN+**, High-Strength Steel Tower for Wind Turbine, RFS2-CT-2014-00023, 2014-2015, Total Budget 478 kEuro
3. **HISTWIN2** High steel tubular towers for wind turbines, **RFSR-CT-2010-00031**, 2010-2013, Total Budget 1,2 mil Euro
4. **FRAMEUP**, Optimization of frames for effective assembling, RFSR-CT-2011-00035, 2011-2014, Total Budget 1,6 mil Euro
5. **HISTWIN**, High-Strength Steel Tower for Wind Turbine, RFSR-CT-2006-00031, 2006-2009, Total Budget 1,5 mil Euro

Partner in following projects:

6. **FAILNOMORE**, Mitigation of the risk of progressive collapse in steel and composite building frames under exceptional events, 2020-2022, Total Budget 0,9 mil Euro
7. **FREDAM PLUS**, Valorisation of knowledge for FREE from DAMage steel connections, 2020-2022, Total Budget 1,3 mil Euro

8. **INNO3DJOINTS**, Innovative 3D joints for robust and economic hybrid tubular construction, 2016-2020, Total Budget 1,4 mil Euro
9. **REDUCE**, Reuse and demountability using steel structures and the circular economy, 2015-2019, Total Budget 2,1 mil Euro
10. **EQUALJOINTS-PLUS**, Valorisation of knowledge for European pre-QUALified steel JOINTS, 2017-2019, Total Budget 1,2 mil Euro
11. **COMPFIRE**, Design of joints to composite columns for improved fire robustness, RFSR-CT-2009-00021 (2009-2012), Total Budget 1,8 mil Euro
12. **RINGMAN**, Offshore Wind Turbine Towers A Quicker, Cheaper Flange Supply Route (2011-2014), Grant agreement for: Research for the benefit of specific groups, Grant agreement no: 286603, Total Budget 1,1 mil Euro
13. **HILONG**, High Strength Long Span Structures RFS-PR-11032, 2012-2015, Total Budget 1,6 mil Euro
14. **RUOSTE**, Rules On high Strength STEel, RFSR-CT-2012-00036, 2012-2015, Total Budget 1,6 mil Euro
15. **INTAB**, Economic and Durable Design of Composite Bridges with Integral Abutments, RFSR-CT-2005-00041, Total Budget 1,5 mil Euro
16. **INTAB+**, Economic and Durable Design of Composite Bridges with Integral Abutments, RFS2-CT-2009-00019, Total Budget 265 k Euro
17. **Erasmus Mundus Master Course- 520121-1-2011-1-CZ-ERA MUNDUS-EMMC**: Sustainable Constructions under Natural Hazards and Catastrophic Events, 2012-2015

Research networks:

- COST Action C25
Sustainability of Constructions: Integrated Approach to Life-time Structural Engineering, 2006-2010
Member of Management Committee,
Chairman of WG2: Life cycle functional performance
- COST Action C26
Urban Habitat Constructions under Catastrophic Events, 2006-2010
Member of Management Committee,
Member of WG1: Fire Design
- Cost Action TU0904
Integrated Fire Engineering and Response, 2009-2013
Member of WG2: Structural Safety
- Cost action TU1304
Wind energy technology reconsideration to enhance the concept of smart cities, 2013-2017
Member of Management Committee,
Chairman of WG2: Life cycle functional performance

Journals:

Reviewer of a couple of dozens of journal papers in following journals:

[Steel and Composite Structures](#),
[Engineering Structures](#),
[Journal of Structural Engineering](#),
[Advanced Steel Construction, an International Journal](#),
[Journal of Constructional Steel Research](#),
[The Arabian Journal for Science and Engineering](#)

[Journal of Wind Engineering & Industrial Aerodynamics](#)

Member of editorial boards of International Journals:

[Advanced Steel Construction, an International Journal,](#)
[Journal of Constructional Steel Research, Elsevier Ltd.,](#)
[Steel Construction Journal, John Wiley,](#)
[Magazine of Civil Engineering, scientific and applied edition.](#)

Evaluator of research projects

- Evaluator of research proposals for Swedish Rescue Service Agency, 2004, 2006,
- Czech Science Foundation, Reviewer of an Application for Standard Grant Project, 2006
- Project evaluation of grant applications submitted to the Research Council of Norway, 2012
- The Research Fund for Coal and Steel (RFCS) is managed by the European Commission, Directorate-General for Research and Innovation, Directorate G (Industrial technologies), Unit G.5.sals, 2009-2013
- The European Research Council Advanced Grant, 2012
- Research Executive Agency (REA) European Commission, evaluation of the proposals submitted in response to the - H2020-LCE-2014-1

Engagement in international conferences, selection

- Steel Companies-Universities Joint Conference, Working together for Growth and Jobs, Warsaw 26-27 April 2007,
Member of Scientific Committee
- 4th International Conference on Steel and Composite Structures, 2010
Member of Scientific Committee
- Eurosteel Conference, 2008, 2011, 2014
Member of Scientific Committee
- International Conference on Steel Bridges (ICSB) 2008, 2015
Member of Scientific Committee
- The Nordic Steel Construction Conference, 2009, 2012, 2015
Member of Scientific Committee
- The Nordic Steel Construction Conference, 2015
Keynote speaker
- International Conference Applications of Structural Fire Engineering, 2009
Member of Scientific Committee
- International Scientific Conference and Workshop METNET, 2014
Member of Scientific Committee
- International Conference on Thin Walled Structures, 2011
Member of Scientific Committee
- The 8th International Conference on Advances in Steel Structures, 2015
Member of Scientific Committee
- Composite Construction in Steel and Concrete, 2008, 2013
Reviewer

Monography

List of peer-reviewed research reports, published by EUROPEAN COMMISSION,
Directorate-General for Research and Innovation,
Internet: http://ec.europa.eu/research/rtdinfo/index_en.html

1. Stranghöner N., Afzali N., Jungbluth D., Abraham C., **Veljkovic M.**, Bijlaard F., Gresnigt N., de Vries P., Kolstein H., Nijgh M., Schedin E., Pilhagen J., Jakobsen E., Söderman A., Glienke R., Ebert A., Badoo N., Chen A., Säynäjäkangas J., Manninen T., Ru H.M., ***Execution and reliability of slip resistant connections for steel structures using CS and SS***, Directorate-General for Research and Innovation EUR, 2019
2. Feldmann M., Schillo N., Schaffrath S. Virdi K., Bjork T., Tuominen ., **Veljkovic M.**, Pavlovic M., Maoleas P., Heinisuo M., Mela K., Ongelin P., Valkonen I., Minkkinen J., Erkkilä J., Pétursson E., Clarin M., Seyr A., Horváth L., Kövesdi B., Turán P., ***Rules on high strength steel***. Directorate-General for Research and Innovation EUR, 2016.
3. **Veljkovic M.**, Heistermann C., Garzon O., Limam M., Tran A.T., Pavlovic M., Feldmann M., Möller F., Richter C., Baniotopoulos C., Gerasimidis S., Zygomalas I., Matos Silva A., da Silva L. Simões, Rebelo C., Pinto P., Matos R., Moura A., Gervásio H., ***“High steel tubular towers for wind turbines”*** Directorate-General for Research and Innovation EUR, 2015
4. **Veljkovic M.**, Andrade P., Heistermann T., Jaspart J.-P., Demonceau J.-F., Hoang Van Long S., Carrasco C., Castaño M., López Vega A., Simões da Silva L., Simões R., Rebelo C., Vicente G., Lundholm N., Lundholm A., Lundholm J., Pak D., Pyschny D., Arseniev M., ***Optimization of frames for effective assembling FRAMEUP***, Directorate-General for Research and Innovation EUR ,2014.
5. Simões da Silva L., Santiago A., Lopes F., **Veljkovic, M.**, Heistermann T., Igbal N., Wald F., Janá T., Davison B., Burgess I., Huang S-S., Dong G., Wang Y., Mandal P., Hu Y., Jafarian M., and Koutlas K., ***Design of composite joints for improved fire robustness***, Directorate-General for Research and Innovation, 2014.
6. Feldmann M., Naumes J., Pak D., Veljkovic M., Eriksen J., Popa N., Hechler O., ***Economic and durable design of composite bridges with integral abutments***, Directorate-General for Research and Innovation, 2012.
7. **Veljkovic M.**, Heistermann C., Husson W., Feldmann M., Naumes J., Pak D., Faber T., Klose M., Fruhner K-U., Krutschinna L., Baniotopoulos C., Lavasas I., Pontes A., Ribeiro E., Hadden M., Sousa R., da Silva L., Rebelo C., Simoes R., Henriques J., Matos R., Nuutinen J., ***High-strength tower in steel for wind turbines***, Directorate-General for Research and Innovation, 2012.

Publications

The citation list is on

<http://scholar.google.com/citations?user=s56PhAoAAAAJ>



The list of published papers may be found in databases of

Delft University of Technology, the Netherlands period 2016-now:

<https://repository.tudelft.nl/islandora/search/veljkovic?collection=research>

Luleå University of Technology, Sweden, period 1993-2019

http://ltu.diva-portal.org/smash/resultList.jsf?dswid=-2154&language=en&searchType=SIMPLE&query=veljkovic&af=%5B%5D&aq=%5B%5B%5D%5D&aq2=%5B%5B%5D%5D&aqe=%5B%5D&noOfRows=50&sortOrder=author_sort_asc&sortOrder2=title_sort_asc&onlyFullText=false&sf=all

and

Selection of journal and conference papers in period 2019-2021 (April)

1. Xin H, Veljkovic M. Fatigue crack initiation prediction using phantom nodes-based extended finite element method for S355 and S690 steel grades. *Eng Fract Mech*. 2019;214:164-176.
2. Xin H, Mosallam A, Liu Y, Veljkovic M, He J. Mechanical characterization of a unidirectional pultruded composite lamina using micromechanics and numerical homogenization. *Constr Build Mater*. 2019;216:101-118.
3. Gritsenko A, Nijgh MP, Veljkovic M. Towards a demountable composite slab floor system. *ce/papers*. 2019;3(3-4):243-249.
4. Girbacea IA, Nijgh MP, Veljkovic M. Economic viability of demountable steel-concrete composite beams. *ce/papers*. 2019;3(3-4):427-432.
5. Spyridoni K, Xin H, Hermans M, Veljkovic M. Calibration of welding simulation parameters of fillet welding joints used in an orthotropic steel deck. *ce/papers*.

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- 2019;3(3-4):49-54.
6. Gîrbacea IA, Nijgh MP, Veljkovic M. Proof of concept of a demountable steel-concrete composite flooring system. *ce/papers*. 2019;3(3-4):571-576.
 7. Nijgh MP, Xin H, Veljkovic M, others. Mechanical properties of (steel-reinforced) resins used in injected bolted connections. *ICCM22 2019*. Published online 2019:2825.
 8. Nijgh MP, Veljkovic M. Demontabele verbinding met injectiebouten. *Bouwen met Staal*. 2019;(270).
 9. Yang F, Veljkovic M. DAMAGE MODEL CALIBRATION FOR S275 AND S690 STEELS. *ce/papers*. 2019;3(5-6):262-271.
 10. Cheng L, Xin H, Veljkovic M. Acoustic emission source location in i girder based on experimental study and lamb wave propagation simulation. *ce/papers*. 2019;3(5-6):3-12.
 11. Yan R, Xin H, Veljkovic M. Identification of GTN damage parameters as a surrogate model for S355. In: *Proc. 17th Int. Symp. Tubul. Struct., Singapore.* ; 2019.
 12. Li Z, Kucukkoc I, Zhang Z. Iterated local search method and mathematical model for sequence-dependent U-shaped disassembly line balancing problem. *Comput & Ind Eng*. 2019;137:106056.
 13. Xin H, Veljkovic M. Effects of residual stresses on fatigue crack initiation of butt-welded plates made of high strength steel. In: *Advances in Engineering Materials, Structures and Systems: Innovations, Mechanics and Applications - Proceedings of the 7th International Conference on Structural Engineering, Mechanics and Computation, 2019.* ; 2019. doi:10.1201/9780429426506-218
 14. Nijgh MP, Veljkovic M. A static and free vibration analysis method for non-prismatic composite beams with a non-uniform flexible shear connection. *Int J Mech Sci*. 2019;159. doi:10.1016/j.ijmecsci.2019.06.018
 15. Tran AT, Bernspång L, Veljkovic M, Rebelo C, da Silva LS. Influence of cold-formed angle on high strength steel material properties. *Adv Steel Constr*. 2019;15(4). doi:10.18057/IJASC.2019.15.4.2
 16. Jovasevic S, Correia J, Pavlovic M, et al. Alternative steel lattice structures for wind energy converters. *Int J Struct Integr*. Published online 2019. doi:10.1108/IJSI-05-2019-0042
 17. Kozma A, Odenbreit C, Braun MV, Veljkovic M, Nijgh MP. Push-out tests on demountable shear connectors of steel-concrete composite structures. *Structures*. 2019;21. doi:10.1016/j.istruc.2019.05.011
 18. Nijgh MP, Gîrbacea IA, Veljkovic M. Elastic behaviour of a tapered steel-concrete composite beam optimized for reuse. *Eng Struct*. 2019;183. doi:10.1016/j.engstruct.2019.01.022
 19. Pedrosa B, Correia JAFO, Rebelo C, et al. Fatigue resistance curves for single and double shear riveted joints from old portuguese metallic bridges. *Eng Fail Anal*. 2019;96. doi:10.1016/j.engfailanal.2018.10.009
 20. Xin H, Nijgh M, Veljkovic M. Computational homogenization simulation on steel reinforced resin used in the injected bolted connections. *Compos Struct*. 2019;210. doi:10.1016/j.compstruct.2018.11.069
 21. Gupta RS, Xin H, Veljkovic M. Fatigue crack propagation simulation of orthotropic bridge deck based on extended finite element method. In: *Procedia Structural Integrity*. Vol 22. ; 2019. doi:10.1016/j.prostr.2020.01.036
 22. Nijgh MP, Veljkovic M. Design of composite flooring systems for reuse. In: *IOP Conference Series: Earth and Environmental Science*. Vol 225. ; 2019.
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- doi:10.1088/1755-1315/225/1/012026
23. Tran AT, Bernspång L, Veljkovic M, Rebelo C, Da Silva LS. Resistance of cold-formed high strength steel angles. *Adv Steel Constr.* 2019;15(3).
doi:10.18057/IJASC.2019.15.3.4
 24. Wu W, Kolstein H, Veljkovic M. Fatigue resistance of rib-to-deck welded joint in OSDs, analyzed by fracture mechanics. *J Constr Steel Res.* 2019;162.
doi:10.1016/j.jcsr.2019.105700
 25. Laghi V, Palermo M, Gasparini G, Veljkovic M, Trombetti T. Assessment of design mechanical parameters and partial safety factors for Wire-and-Arc Additive Manufactured stainless steel. *Eng Struct.* 2020;225.
doi:10.1016/j.engstruct.2020.111314
 26. Nijgh MP, Veljkovic M. An optimisation strategy for the (in-and out-of-plane) resistance of steel beams in demountable composite floor systems. In: *Structures*. Vol 24. ; 2020:880-889.
 27. Xin H, Veljkovic M. Residual stress effects on fatigue crack growth rate of mild steel S355 exposed to air and seawater environments. *Mater \& Des.* 2020;193:108732.
 28. Pedrosa B, Correia JAFO, Rebelo CAS, Veljkovic M. Reliability of Fatigue Strength Curves for Riveted Connections Using Normal and Weibull Distribution Functions. *ASCE-ASME J Risk Uncertain Eng Syst Part A Civ Eng.* 2020;6(3):4020034.
 29. Liu X, Wang Y, Ban H, Liu M, Veljkovic M, Bijlaard FSK. Flexural strength and rotation capacity of welded I-section steel beams with longitudinally profiled flanges. *J Constr Steel Res.* 2020;173:106255.
 30. Xin H, Cheng L, Diender R, Veljkovic M. Fracture acoustic emission signals identification of stay cables in bridge engineering application using deep transfer learning and wavelet analysis. *Adv Bridg Eng.* 2020;1(1):1-16.
 31. Yang F, Veljkovic M, Liu Y. Ductile damage model calibration for high-strength structural steels. *Constr Build Mater.* 2020;263:120632.
 32. Pedrosa B, Correia JAFO, Rebelo CAS, Veljkovic M. Erratum for “Reliability of Fatigue Strength Curves for Riveted Connections Using Normal and Weibull Distribution Functions” by Bruno Pedrosa, José AFO Correia, Carlos AS Rebelo, and Milan Veljkovic. *ASCE-ASME J Risk Uncertain Eng Syst Part A Civ Eng.* 2020;6(4):8220003.
 33. Xin H, Nijgh M, Veljkovic M. Faculty of Civil Engineering and Geosciences, Delft University of Technology, Delft, The Netherlands. Published online 2020.
 34. Cheng L, Xin H, Groves RM, Veljkovic M. Plasticity and damage characteristic of acoustic emission signals for S460 steel exposed to tensile load. In: *Virtual Conference on Mechanical Fatigue.* ; 2020.
 35. Nijgh MPM, Veljkovic MM. Requirements for oversized holes for reusable steel-concrete composite floor systems. *Structures.* 2020;24.
doi:10.1016/j.istruc.2020.01.021
 36. Yang F, Veljkovic M, Liu Y. Fracture simulation of partially threaded bolts under tensile loading. *Eng Struct.* 2021;226:111373.
 37. Xin H, Veljkovic M. Evaluation of high strength steels fracture based on uniaxial stress-strain curves. *Eng Fail Anal.* 2021;120:105025.
 38. van den Berg N, Xin H, Veljkovic M. Effects of residual stresses on fatigue crack propagation of an orthotropic steel bridge deck. *Mater \& Des.* 2021;198:109294.
 39. Xin H, Correia JAFO, Veljkovic M. Three-dimensional fatigue crack propagation simulation using extended finite element methods for steel grades S355 and S690 considering mean stress effects. *Eng Struct.* 2021;227:111414.
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40. Cheng L, Xin H, Groves RM, Veljkovic M. Acoustic emission source location using Lamb wave propagation simulation and artificial neural network for I-shaped steel girder. *Constr Build Mater.* 2021;273:121706.
 41. Xin H, Veljkovic M, Correia JAFO, Berto F. Ductile fracture locus identification using mesoscale critical equivalent plastic strain. *Fatigue & Fract Eng Mater & Struct.* 2021;44(5):1292-1304.
 42. Xin H, Correia JAFO, Veljkovic M, Berto F, Manuel L. Residual stress effects on fatigue life prediction using hardness measurements for butt-welded joints made of high strength steels. *Int J Fatigue.* 2021;147:106175.
 43. Xin H, Correia JAFO, Veljkovic M, Berto F. Fracture parameters calibration and validation for the high strength steel based on the mesoscale failure index. *Theor Appl Fract Mech.* 2021;112:102929.
 44. Pedrosa B, Correia J, Rebelo C, Veljkovic M, Gervásio H. Fatigue experimental characterization of preloaded injection bolts in a metallic bridge strengthening scenario. *Eng Struct.* 2021;234:112005.
 45. Pavlovic M, Bogers P, Veljkovic M. Method for Making a Virgin Joint Between Two Separate Structural Hollow Sections, and Such a Virgin Joint. Published online 2021.
 46. Xin H, Kisoensingh P, Veljkovic M. Mechanical behaviour of welded high strength steel rectangular hollow section joints. *Eng Fail Anal.* Published online 2021:105410.
 47. Yang F, Liu Y, Xin H, Veljkovic M. Fracture simulation of a demountable steel-concrete bolted connector in push-out tests. *Eng Struct.* 2021;239:112305.
 48. Yang F, Liu Y, Xin H, Veljkovic M. Fracture simulation of a demountable steel-concrete bolted connector in push-out tests. *Eng Struct.* 2021;239(July 2020):112305. doi:10.1016/j.engstruct.2021.112305
 49. Xin H, Correia JAFO, Veljkovic M. Three-dimensional fatigue crack propagation simulation using extended finite element methods for steel grades S355 and S690 considering mean stress effects. *Eng Struct.* 2021;227(August 2020). doi:10.1016/j.engstruct.2020.111414
 50. Cheng L, Xin H, Groves RM, Veljkovic M. Acoustic emission source location using Lamb wave propagation simulation and artificial neural network for I-shaped steel girder. *Constr Build Mater.* 2021;273:121706. doi:10.1016/j.conbuildmat.2020.121706
 51. van den Berg N, Xin H, Veljkovic M. Effects of residual stresses on fatigue crack propagation of an orthotropic steel bridge deck. *Mater Des.* 2021;198:109294. doi:10.1016/j.matdes.2020.109294
 52. Xin H, Veljkovic M, Correia JAFO, Berto F. Ductile fracture locus identification using mesoscale critical equivalent plastic strain. *Fatigue Fract Eng Mater Struct.* Published online 2021. doi:10.1111/ffe.13429
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