

# ALPER KANYILMAZ

Civil Engineer, PhD

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Curriculum Vitae - 17.05.2018

## SUMMARY

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Alper Kanyilmaz, born in Izmir (Turkey) on 27.10.1983, is a certified Civil Engineer in Italy with a PhD degree. He is experienced in large scale testing and advanced finite element numerical analysis, mainly in the fields of steel structures, seismic isolation systems and industrial structures (silos, racks). He has 60+ publications in the top international journals and peer-reviewed conferences. He wrote and co-authored several research proposals which obtained 1M+ Eur grant from European Commission. He has continuously held research grants at the Politecnico di Milano since 2010. In the same period, he worked on several research projects funded by the European Commission, working in close collaboration with numerous international research institutes and companies.

His current research interests include:

(I) Advanced manufacturing of steel structures by means of Laser Cutting Technology and Additive Manufacturing.

(II) Replacable dissipative devices and seismic isolation techniques to enhance the seismic behaviour and sustainability performance of steel structures (buildings and industrial systems such as silos and tanks).

(III) Seismic analysis of ordinary steel and steel-concrete composite structures in low-to-moderate seismicity regions.

(IV) Pallet racking systems and automated warehouses made of cold formed steel profiles: Seismic behaviour, Fatigue performance.

## EDUCATION

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<b>PhD in Architecture, Built Environment and Construction Engineering</b> Politecnico di Milano (Italy), Honor degree (Cum laude).	01.11.2013 - 27.03.2017
<b>MSc in Civil Engineering</b> Politecnico di Milano (Italy).	09.10.2007 - 04.05.2010
<b>BSc in Civil Engineering</b> Middle East Technical University (Turkey).	01.10.2001 - 11.06.2006

## EMPLOYEMENT HISTORY

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<b>Politecnico di Milano, Italy</b> Post-doc researcher, teaching assistant	28.03.2017 - Present
<b>Politecnico di Milano, Italy</b> Research fellow, teaching assistant	01.08.2010 - 27.03.2017
<b>Fincon Consulting Italia, Italy</b> Partner, Engineering consultant	01.08.2010 - Present

## RESEARCH ACTIVITIES

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Classified into the research interests:

### *(I) Advanced manufacturing of steel structures by means of Laser Cutting Technology*

**Technical lead and co-coordinator of the EU-RFCS/Horizon 2020 project LASTEICON–Laser Technology for Innovative Connections in Steel Construction- funded for the three-year period 2016-2019 by the European Commission, Grant: €1,156,601.58. 2016 - Present**

A. Kanyilmaz, on behalf of Fincon Consulting Italia, carries out both coordination and scientific activities within the project. As for the coordination, he assists the coordinator (Prof. C.A. Castiglioni) in monitoring the status of the beneficiaries' activities to ensure an effective interaction between the individual Work packages and the project objectives, participates in the coordination of the legal, financial and administrative aspects through a direct communication with the European Commission and drafts the periodic technical reports. Regarding the scientific activity, the candidate is involved in the design of the joints between I-beams and the circular tubular profiles using laser cutting technology, and supervised the assembly phases of the joints in workshop. The activity carried out by A. Kanyilmaz is highlighted by the publications [1][16][29][32].

### *(II) Replacable dissipative devices and seismic isolation techniques to enhance the seismic behaviour and sustainability performance of steel structures (buildings and industrial systems such as silos and tanks)*

**Primary coordinator contact, EU-RFCS/Horizon 2020 project DISSIPABLE -Fully Dissipative and Easily Repairable Devices for Resilient Buildings with Composite Steel-Concrete Structures-, Grant: €907,405.82. 2018 - Present**

A. Kanyilmaz, inside the operational unit of Politecnico di Milano supervises the technical activity regarding the development of finite element models capable to accurately simulate both the local behavior of the anti-seismic devices and the global behavior of pilot structural systems incorporating them.

**Participation in the scientific activities of Politecnico di Milano, partner of the INNOSEIS international research project -Valorization of innovative anti-seismic devices-, funded by the European Commission, Grant: €597,396.00. 2016 - 2018**

A. Kanyilmaz, holder of a research grant, participated in the drafting of guidelines for the use of dissipative devices recently developed in European research projects. The activity is documented by publications [20][33].

**Scientific consultant of Neapolis University (Cyprus), partner of the EU-RFCS/Horizon 2020 project PROINDUSTRY -Seismic protection of industrial plants by enhanced steel based systems-, Grant €940,749.00 2013 - 2016**

A. Kanyilmaz has performed numerical simulations of the behavior of silos and industrial tanks through different philosophies, starting from the more complex ones, in which the content is modeled by three-dimensional finite elements, to those in which the presence of the material

is instead simulated by distributions of masses and pressures. He studied the seismic vulnerability of an existing steel industrial silo system by means of incremental dynamic analysis, and proposed a retrofitting solution that uses single curved surface sliding pendulum devices. The activity is highlighted by the publications [4][14][23][38][39].

**Participation in the activities of Politecnico di Milano, partner of the research project FUSEIS RFSR-CT-2008-00032 funded by the European Commission (Grant: €444,810.00).** 2010 - 2011

The research was carried out in cooperation with NTUA-Athens, IST-Lisbon, RWTH-Aachen, SIDENOR-Athens. A. Kanyilmaz, holder of a research grant, assisted the real-scale experimental tests of the frames with replaceable dissipative devices. Based on the results, he developed and calibrated finite element numerical models with which he performed parametric analyses and produced the related design guidelines. Finally, he drafted the final reports by introducing the design procedures for steel and steel-concrete composite frames, in the presence of dissipative elements. The following publications highlight the activity performed within this research [7][8][10][15][19][24][28][42][45][52][53][54][57][59][60].

*(III) Seismic analysis of ordinary steel and steel-concrete composite structures in low-to-moderate seismicity regions*

**Participation in the scientific activities of Politecnico di Milano, partner of the international research project MEAKADO RFSR-CT-2013-00022, funded by the European Commission (Grant: €783.015.00)** 2013 - 2016

A. Kanyilmaz, owner of a research grant, developed an adjusted design approach for the low-to-moderate seismicity design of CBF structures, satisfying both economy and safety criteria. The activity was carried out by means of real scale experimental tests as well as numerical analysis. In complete autonomy, he managed a team of students, interns and technicians for the experimental tests in the Materials Testing Laboratory (LPM) of Politecnico di Milano. The following publications highlight the activity performed: [3][5][6][13][17][25][34][35][36][37][41][42][43].

*(IV) Pallet racking systems and automated warehouses made of cold formed steel profiles: Seismic behaviour, Fatigue performance.*

**Technical Responsible on behalf of Fincon Consulting Italy for the EU-RFCS/Horizon 2020 project FASTCOLD (Fatigue Strength of Cold-Formed Structural Steel Details), funded by the European Commission, for the three-year period 2017-2020, Grant: €1,724,361.48.** 2017 - present

A. Kanyilmaz coordinates a series of numerical activities with the aim of developing fatigue design rules for cold-formed steel elements and their connections, with particular attention to applications for the logistics industry (e.g., racking systems).

**Technical lead on behalf of Fincon Consulting Italy for the EU-RFCS/Horizon 2020 project STEELWAR (Advanced Structural Solutions for Automated Steel Rack Supported Warehouses), funded by the European Commission, for period 2017-2021, Grant: €1,473,275.88.** 2017 - present

A. Kanyilmaz coordinates numerical analysis activities with the aim of developing innovative so-

lutions for self-supporting warehouses, with particular attention to their behavior under seismic conditions and under the action of the wind.

**Participation in the activities of the Politecnico di Milano, coordinator of the international research project EU-RFCS/Horizon 2020 SEISRACKS2 -Seismic Behavior of Steel Storage Pallet Racking Systems-, funded by the European Commission (Grant: €865,269.00). 2011 - 2013**

The POLIMI research group has coordinated a consortium formed by partners from 5 European countries. A. Kanyilmaz, holder of a research grant in the POLIMI operative unit, assisted the push-over experimental tests on full-scale structures in the presence and absence of the vertical bracings, to assess their ductility performance. Furthermore, he carried out the re-analysis of the test results, developed and calibrated nonlinear finite element numerical models on the basis of the experimental results and he worked for the development of new anti-seismic design methodologies. The results of this research have formed the basis of the new European seismic standard EN 16681: 2016 -Steel static storage systems - Pallet racking - Principles for seismic design- which specifies the structural design requirements applicable to all systems of pallet racking consisting of steel elements subject to seismic actions. The activity carried out by A. Kanyilmaz is highlighted by the publications [2][9][11][12][18][21][22][27][40][44][48][49][50][51].

## RESEARCH GRANT WRITING

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**EU-RFCS/Horizon 2020 project DISSIPABLE -Fully Dissipative and Easily Repairable Devices for Resilient Buildings with Composite Steel-Concrete Structures- Grant: €907,405.82. 2017**

A. Kanyilmaz, inside the operational unit of Politecnico di Milano, coordinated the research proposal writing, which won the grant in 09.01.2018. Grant Agreement of the project was signed on 13.03.2018 for the three-year period 2018-2022.

**EU-RFCS/Horizon 2020 project LASTEICON -Laser Technology for Innovative Connections in Steel Construction- funded for the three-year period 2016-2019 by the European Commission, Grant: €1,156,601.58. 2016 - Present**

A. Kanyilmaz, inside the operational unit of Fincon Consulting Italia, co-coordinated the research proposal writing, which won the grant in 02.03.2016. Grant Agreement of the project was signed on 20.06.2016 for the three-year period 2016-2019.

## TEACHING ACTIVITIES

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### **Teaching assistant at the following courses:**

Architecture of Steel Constructions, 4th year, CFU 4.00, Architecture, Instructor: Prof. Carlo Andrea Castiglioni:

Sem.1 of 2017-2018 No. of students: 16

Sem.1 of 2016-2017, Arc-Urb-Cost, No. of students: 63

Sem.1 of 2015-2016 No. of students: 37

Sem.1 of 2014-2015 No. of students: 38

Design of Structures, 4th year, CFU 9.00, Building Engineering, Instructor: Prof. Carlo Andrea Castiglioni

Sem.1 of 2017-2018, No. of students: 86

Sem.1 of 2016-2017, No. of students: 58

Sem.1 of 2015-2016, No. of students: 16

Building systems and component design, 4th year, Building Engineering, CFU 9.00, Instructor: Prof. Enrico De Angelis

Sem.2 of 2015-2016, No. of students: 46

Sem.2 of 2014-2015, No. of students: 49

### **Co-supervisor of the following Master-theses:**

Ric Joseph Cardinal and Samantha Carolina Mora Hidalgo, Optimization of steel structural components by means of Additive Manufacturing, ICAR/09, A.A. 2018/2019, Supervisors: Prof. Ingrid Paoletti, Prof. Carlo A. Castiglioni

Susanna Aliberti, Design of full scale test specimens for the investigation of fully dissipative and repairable steel-concrete composite structures, ICAR/09, A.A. 2018/2019, Supervisor: Prof. Carlo A. Castiglioni

Oja Morina and Dimitrios Pinakiotis, Detailed FE analysis of the dissipative and repairable steel connections of the full scale test specimens designed for the shake table testing specimens ICAR/09, A.A. 2018/2019, Supervisor: Prof. Carlo A. Castiglioni

Muhammed Amir ICAR/09, Seismic and wind analysis of the warehouses made of cold formed steel, A.A. 2018/2019, Supervisor: Prof. Carlo A. Castiglioni

Kushagra Kapoor, Steel-concrete composite connections fabricated by means of Laser Cutting Technology ICAR/09, A.A. 2017/2018, Supervisor: Prof. Carlo A. Castiglioni

Kristian Gjoka, I beam to CHS column joints using laser cutting technology: An analytical approach, ICAR/09, A.A. 2016/2017, Supervisor: Prof. Carlo A. Castiglioni

Umberto Rico, Real scale test for seismic assess of concentrically braced frame, ICAR/09, A.A. 2016/2017.

Jose Leonardo Quintero Guell, Seismic retrofitting strategies of an elevated silo structure by means of isolation devices, ICAR/08, A.A. 2015/2016, Supervisor: Prof. Carlo A. Castiglioni

Alberto Volonterio, Prove cicliche su telaio in acciaio a scala reale con controventi concentrici disposti a X, ICAR/09, A.A. 2014/2015, Supervisor: Prof. Carlo A. Castiglioni

Mauro Vitale, Modellazione numerica di un telaio in acciaio controventato concentricamente per zone di media bassa sismicit, ICAR/09, A.A. 2014/2015, Supervisor: Prof. Carlo A.

Castiglioni

Fabio De Fanis, Adeguamento sismico di sili sopraelevati in acciaio mediante isolamento alla base, ICAR/09, A.A. 2014/2015, Supervisor: Prof. Carlo A. Castiglioni

Federica Spitaleri, Steel-concrete composite multi-storey buildings with dissipative devices, ICAR/09, A.A. 2013/2014, Supervisor: Prof. Carlo A. Castiglioni

Alex Belingheri, Progettazione ottimizzata di strutture controventate in acciaio in zone a media-bassa sismicit, ICAR/09, A.A. 2013/2014, Supervisor: Prof. Carlo A. Castiglioni

**Supervisor for the internship students:**

Rob Vandeweyer, studente del University of Hasselt (Belgium) in Fincon Consulting Italia srl, between 9.10.2017 and 17.11.2017

Ric Joseph Caringal, Materials testing laboratory (LPM) of Politecnico di Milano, between 18.04.2016 and 03.06.2016

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**AWARDS AND SCHOLARSHIPS**

**Joint winner at -The Third Concrete Design Competition 2007/2008 Implicit Performance - Exploring the Hybrid Condition-** 26.05.2008

This is a biennial competition of innovative ideas related to the use of concrete, organized and financed by a consortium of European Cement associations. A. Kanyilmaz acted as the structural engineer on the team that won the -Joint Winner- award with the -Reverse effect- project with a prize money as well as an invitation to participate in the Master Class in Antwerp, Belgium. The jury's judgment is as follows: -The Reverse Effect project was awarded for the application of the- hybrid -concept to both the system and the material. The project, rich in inventiveness and imagination, provides a system of floating elements that can be used for a city on the water that uses the thrust of the fluid as a constructive component, a hybrid component made of the reinforced concrete and steel fibers.

**Second place with prize money at Prosteel, International Steel Design Competition 2006, Istanbul, Turkey.** 18.04.2006

Prosteel is a competition organized by the Turkish Structural Steel Association (TUCSA) since 2004, sponsored by Borusan Mannesmann, where mixed groups composed of students of architecture and civil engineering compete. A. Kanyilmaz was the structural engineering student of the team that unanimously won second place with the -Student social center-project.

**Full Scholarship of ICE Unioncamere 2007** 09.10.2007 - 08.10.2009

A. Kanyilmaz won a scholarship called -ICE-UNIONCAMERE Scholarship- which consists of a total sum of €16,000.00 for the study of the Master in Civil Engineering for the period between September 2007 and September 2009 at the Politecnico di Milano.

## SERVICE TO THE ACADEMY

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Reviewer in the following scientific journals

*Engineering Structures (Elsevier)*

*Journal of Constructional Steel Research (Elsevier)*

*Thin Walled Structures (Elsevier)*

*Structures (Elsevier)*

*Journal of Structural Engineering (ASCE)*

*Bulletin of Earthquake Engineering (Springer Nature)*

Participation to the Editorial Committee of CST2018 The Thirteenth International Conference on Computational Structures Technology, Sitges, Barcelona, Spain 4-6 September 2018

Organization of special session "Laser cutting technology" in the CST2018 The Thirteenth International Conference on Computational Structures Technology, Sitges, Barcelona, Spain 4-6 September 2018

## PERSONAL SKILLS

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<b>Language</b>	Fluent in English, Italian, Native in Turkish
<b>Software</b>	MATLAB, ABAQUS, ANSYS, SAP2000, STRAND7, AUTOCAD, EXCEL
<b>Other</b>	Cycling, music

## PUBLICATION LIST

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Publications of A. Kanyilmaz range between 2011-2018. According to Scopus, up to date he received 79 citations, and his current h-index is 4 (excluding self-citations).

### Refereed academic journals:

- [1] *Kanyilmaz, A.*, Castiglioni C.A., Fabrication of laser cut I-beam-to-CHS-column steel joints with minimized welding, *Journal of Constructional Steel Research* (Elsevier), Volume 146, 2018, pages 16-32, ISSN 0143-974X, doi: 10.1016/j.jcsr.2018.02.039
- [2] Castiglioni C.A., Drei A., *Kanyilmaz, A.* (2018) Continuous Monitoring of Service Conditions of a Steel Storage Racking System. *JOURNAL OF EARTHQUAKE ENGINEERING*, vol. N/A, p. 1-21, ISSN: 1363-2469, doi: 10.1080/13632469.2018.1453402
- [3] *Kanyilmaz, A.*, Moderate ductility of the bracing joints with preloaded bolts (2018), *Bulletin of Earthquake Engineering* (Springer Nature), vol. 16, p. 503-527, ISSN: 1570-761X, doi: 10.1007/s10518-017-0208-5
- [4] *Kanyilmaz, A.*, Castiglioni C.A., Reducing the seismic vulnerability of existing elevated silos by means of base isolation devices (2017), *Engineering Structures* (Elsevier), vol. 143, p. 477-497, ISSN: 0141-0296, doi: 10.1016/j.engstruct.2017.04.032
- [5] *Kanyilmaz, A.*, Role of compression diagonals in concentrically braced frames in moderate seismicity: A full scale experimental study (2017) *Journal of Constructional Steel Research* (Elsevier), vol. 133, p. 1-18, ISSN: 0143-974X, doi: 10.1016/j.jcsr.2017.01.023
- [6] *Kanyilmaz, A.*, Secondary frame action in concentrically braced frames designed for moderate seismicity: a full scale experimental study (2017) *Bulletin of Earthquake Engineering* (Springer Nature), vol. 15, p. 2101-2127, ISSN: 1570-761X, doi: 10.1007/s10518-016-0054-x
- [7] Valente, M., Castiglioni, C.A., *Kanyilmaz, A.*, Numerical investigations of repairable dissipative bolted fuses for earthquake resistant composite steel frames (2017) *Engineering Structures* (Elsevier), vol. 131, p. 275-292, ISSN: 0141-0296, doi: 10.1016/j.engstruct.2016.11.004
- [8] Valente, M., Castiglioni, C.A., *Kanyilmaz, A.*, Welded fuses for dissipative beam-to-column connections of composite steel frames: Numerical analyses (2017) *Journal of Constructional Steel Research* (Elsevier), vol. 128, p. 498-511, ISSN: 0143-974X, doi: 10.1016/j.jcsr.2016.09.003.
- [9] Gabbianelli, G., *Kanyilmaz, A.*, Bernuzzi, C., Castiglioni, C.A., A combined experimental-numerical study on unbraced pallet rack under pushover loads (2017) *Ingegneria Sismica*, vol. 34, p. 18-38, ISSN: 0393-1420.
- [10] Valente, M., Castiglioni, C.A., *Kanyilmaz, A.*, Dissipative devices for earthquake resistant composite steel structures: bolted versus welded solution (2016) *Bulletin of Earthquake Engineering*, vol. 14, p. 3613-3639, ISSN: 1570-761X, doi: 10.1007/s10518-016-0002-9.
- [11] *Kanyilmaz, A.*, Castiglioni, C.A., Brambilla, G., Chiarelli, G.P., Experimental assessment of the seismic behavior of unbraced steel storage pallet racks (2016) *Thin-Walled Structures* (Elsevier), vol. 108, p. 391-405, ISSN: 0263-8231, doi: 10.1016/j.tws.2016.09.001.
- [12] *Kanyilmaz, A.*, Brambilla G., Chiarelli G., Castiglioni C.A, Assessment of the seismic behavior of braced steel storage racking systems by mean of full scale push over tests (2016), *Thin-Walled Structures* (Elsevier), vol. 107, p. 138-155, ISSN: 0263-8231, doi: 10.1016/j.tws.2016.06.004



- [13] *Kanyilmaz, A.*, Validation of Fiber-Based Distributed Plasticity Approach for Steel Bracing Models, *Civil Engineering Journal* Vol.1, No.2, 2015, ISSN:2476-3055
- [14] Castiglioni, C.A., *Kanyilmaz, A.*, Simplified numerical modeling of elevated silos for non-linear dynamic analysis (2015) *Ingegneria Sismica*, 33 (1-2), pp. 5-14.
- [15] Castiglioni C.A., *Kanyilmaz, A.*, Calado L., Experimental analysis of seismic resistant composite steel frames with dissipative devices (2012), *Journal of Constructional Steel Research* (Elsevier), vol. 76, p. 1-12, ISSN: 1873-5983, doi: 10.1016/j.jcsr.2012.03.027

*Accepted / Under review*

- [16] *Kanyilmaz, A.*, Castiglioni C.A., Laser cutting technology in the connections of circular hollow sections: A review of research, applications, opportunities, *Eng. Structures*, U. review
- [17] *Kanyilmaz, A.*, Degee, H., Castiglioni C.A., An adjusted design approach for concentrically braced frames in low-to-moderate seismicity areas, *Bulletin of Earthquake Engineering* (Springer Nature), Accepted for publication, in press
- [18] Castiglioni C.A., Drei A., Mouzakis H., *Kanyilmaz, A.*, Earthquake-Induced pallet sliding in industrial racking systems, *Journal of Building Engineering* (Elsevier), Accepted for publication
- [19] *Kanyilmaz, A.*, Castiglioni C.A., Muhaxeri M., Influence of replacable bolted dissipative beam splices (structural fuses) on re-duc-ing the seismic vulnerability of steel-concrete composite frames, *Soil Dynamics and Earthquake Engineering* (Elsevier), Under review
- [20] Vamvatsikos D., Bakalis K., Kohrangi M., Pyrza S., Castiglioni C.A., *Kanyilmaz, A.*, Morelli F., Stratan A., D'aniello M., Calado L., Proenca J.M., Degee H., Hoffmeister B., Pinkawa M., Thanopoulos P., Vayas I., A Risk-Consistent Approach to Determine Behaviour Factors for Innovative Steel Lateral Load Resisting Systems, SDEE, U. review

#### **National Engineering Practice Journals:**

- [21] Castiglioni C.A., *Kanyilmaz, A.*, Chiarelli G.P., Brambilla G., The research Activities at Politecnico di Milano on the Static and Seismic Behaviour of Steel Storage Racking Systems, *Costruzioni Metalliche*, XVIII,n.3 2016, pag 25-41
- [22] Castiglioni C.A., *Kanyilmaz, A.*, et al. The SEISRACKS2 EU-RFCS/Horizon 2020 Research Project Seismic Behaviour of Steel Storage Pallet Racking Systems, *Costruzioni Metalliche*, XVII, n.1, 2015, pp 37-48.
- [23] *Kanyilmaz, A.*, Castiglioni C.A., Chiarelli, G.P., Brambilla G., Modellazione numerica di silos e serbatoi in acciaio soggetti ad azioni sismiche, *Il Giornale dell'ingegnere*, n.11, 2015, pp 8,10, Qine, Milano
- [24] Castiglioni C.A., *Kanyilmaz, A.*, Calado L., Prioena J.M., Hoffmeister B., Vayas I., Numerical and experimental results of the FUSEIS project Dissipative devices for seismic resistant frames, *Costruzioni Metalliche*, March-April 2014;

#### **Research reports published as books:**

- [25] Degee H., Henriques, J. G., Vleminckx L., Denoel V., Hoffmeister B., Wieschollek M. Castiglioni C.A., *Kanyilmaz A.*, Martin P.O., Rodier A., Couchaux M., Calderon I., Aramburu A., Galazzi A., Cornil A., Duchene Y., Radu J.P., Dege H., Henriques, RFCS-CT-2013-00022 Design of steel and composite structures with limited ductility requirements for optimized performances in moderate earthquake areas (MEAKADO) - Final Report, in press by European Commission

[26] Salvatore, W., Morelli F., De Pasquale E., Tesi M., Degee H., Hoffmeister B., Pinkawa M., Bakas N., Castiglioni C.A., *Kanyilmaz A.*, Braga F., Faggella M., Laguardia R., Gigliotti R., Rossi E., Butz C., Medeot R. PROINDUSTRY RFSR-CT- 2013-00019 - Final Report, in press by European Commission

[27] Castiglioni C.A, *Kanyilmaz, A.* et al., Seismic Behaviour of Steel Storage Pallet Racking Systems (SEISRACKS2), European Commission, Research Fund for Coal and Steel, Final Report, EUR 27583 EN, doi: 10.2777/931597, ISBN 978-92-79-53896-4, KI-NA-27-583-EN-C, 2014

[28] Vayas, I., Karydakis, P., Dimakogianni, D. Dougka, G., *Kanyilmaz, A.*, Castiglioni, C.A., Hoffmeister, B., Heinmeyer, C., Rauert, T., Espinha, M., Calado, L., Proenca, J., Kalteziotis, D., Dissipative devices for seismic-resistant steel frames (Fuseis), European Commission, Research Fund for Coal and Steel, Final Report, doi: 10.2777/88177, ISBN 978-92-79-29186-9, KI-NA-25901-EN-N, 2013

### Conference Proceedings:

[29] *Kanyilmaz, A.*, Castiglioni C.A., Raso S., Valli A., Brugnolli M., Galazzi A., Hojda R., Circular hollow section joint fabrication using laser cutting technology: Tolerance assessment, Tubular Structures XVI, Taylor Francis Group, ISBN 978-0-8153-8131-1, pp. 631-637 (2018)

[30] Martin P.O., Rodier A., Couchaux M., *Kanyilmaz, A.*, Degee. H., Assessment of the ductile behaviour of CBF structures considering energy dissipation in bolted joints, EUROSTEEL 2017, September 1315, 2017, Copenhagen, Denmark, Ernst Sohn Verlag fr Architektur und technische Wissenschaften GmbH Co. KG, Berlin, CE/papers (2017), doi.org/10.1002/cepa.384

[31] *Kanyilmaz, A.*, Castiglioni C.A., Degee H., Seismic behaviour of concentrically braced frames in the moderate seismicity context, EUROSTEEL 2017, September 1315, 2017, Copenhagen, Denmark, Ernst Sohn Verlag fr Architektur und technische Wissenschaften GmbH Co. KG, Berlin, CE/papers (2017), doi.org/10.1002/cepa.400

[32] *Kanyilmaz, A.*, Castiglioni C.A., Brambilla G., Gjoka K., Galazzi A., Raso S., Valli A., Brugnolli M., Hojda R., Experimental assessment of tolerances for the fabrication of laser-cut steel joints, EUROSTEEL 2017, September 1315, 2017, Copenhagen, Denmark, Ernst Sohn Verlag fr Architektur und technische Wissenschaften GmbH Co. KG, Berlin, CE/papers (2017), doi.org/10.1002/cepa.117

[33] Vamvatsikos D., Castiglioni C.A., Bakalis K., Calado L., D’Aniello M., Degee H., Hoffmeister B., Pinkawa M., Proenca J.M., *Kanyilmaz, A.*, Morelli F., Stratan A., Vayas I., A risk-consistent approach to determine behaviour factors for innovative steel lateral load resisting systems, EUROSTEEL 2017, September 1315, 2017, Copenhagen, Denmark, Ernst Sohn Verlag fr Architektur und technische Wissenschaften GmbH Co. KG, Berlin, CE/papers (2017), doi.org/10.1002/cepa.398

[34] Degee H., Henriques J., Martin P.O., Calderon I., *Kanyilmaz, A.*, Castiglioni C.A., Optimal Design of Concentrically Braced Steel Frames in Moderate Earthquake Areas, Proceedings of 16th World Conference on Earthquake Engineering 2017

[35] *Kanyilmaz, A.*, Castiglioni C.A., Degee H., Full Scale Experimental Assessment of Concentrically Braced Steel Frames Designed for Moderate Seismicity, Proceedings of 16th World Conference on Earthquake Engineering 2017

[36] Castiglioni, C.A, *Kanyilmaz, A.*, Degee H., Calderon, I., Martin, P.O., Design of concentrically braced steel frames for optimized performances in moderate earthquake areas, Proceedings

of the International Colloquium on Stability and Ductility of Steel Structures, SDSS 2016, ISBN 978-929147133-1

[37] Aramburu A., Calderon I., Couchaux M., Degee H., Hoffmeister B., *Kanyilmaz, A.*, Martin, P.O., Wieschollek M., Design of Steel and Composite Structures with Limited Ductility Requirements for Optimized Performances in Moderate Earthquake Areas The -Meakado- Project, SECED 2015 Conference: Earthquake Risk and Engineering towards a Resilient World 9-10 July 2015, Cambridge UK

[38] *Kanyilmaz, A.*, Numerical modelling of the seismic behaviour of steel silos and tanks, Oral presentation, International CAE Conference 2015, Pacengo del Garda, Verona, Italy

[39] *Kanyilmaz, A.*, Castiglioni, C.A, J. Georgi, Seismic retrofit of industrial silos by means of base isolation devices, Proc of ECCOMAS 2016, Volume 3, 2016, Pages 5868-5895

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