

# Curriculum Vitae

## KONSTANTINOS A. SKALOMENOS

Assistant Professor, Kyoto University



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(as of May 2018)

### 1. EDUCATION

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#### University of Patras – Department of Civil Engineering, Greece

- 10/2009 – 05/2014 Doctor of Engineering (Ph.D)  
in Structural Dynamics and Seismic Design of Composite Steel/Concrete Structures  
Dissertation: *Seismic performance of plane moment resisting frames with concrete filled steel tube columns and steel I beams*  
Advisor: Professor Dimitri E. Beskos
- 09/2007 – 09/2009 Master of Science in Seismic Design of Structures (M.Sc.)  
in Structural Dynamics and Seismic Design of Steel Structures  
Thesis: *Development of spatial combination rules of seismic responses of tall steel structures*  
Advisor: Professor Dimitri E. Beskos
- 09/2002 – 07/2007 Diploma in Civil Engineering (5 years program - M.Eng.)  
Division of Structural Engineering  
Thesis: *Comparison of two new seismic design methods for steel structures with the design method based on Eurocode 8: a) the displacement-based design (DBD) method, and b) the hybrid force/displacement design (HFD) method.*

### 2. RESEARCH AREAS

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Earthquake and Structural Engineering, High-Performance Steel and Composite Steel/Concrete Structures, Advanced Materials and Material Technologies, Seismic Assessment and Retrofitting Techniques, Novel Experimental Methods

### 3. ACADEMIC APPOINTMENTS/EXPERIENCE

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#### Kyoto University – Disaster Prevention Research Institute (DPRI), Japan

- 04/2017 – Today Specially-Appointed Assistant Professor
- 04/2015 – 03/2017 Post-Doctoral Fellow of the Japan Society for Promotion of Science (JSPS)  
(under Prof. Masayoshi Nakashima)
- 02/2015 – 03/2015 Post-Doctoral Research Associate
- 09/2014 – 10/2014 Visiting Graduate Researcher (Nakashima & Kurata lab)

#### University of Patras – Department of Civil Engineering, Greece

- 08/2013 – 01/2015 Graduate Research Assistant

09/2008 – 04/2014 Graduate Teaching Assistant

**University of Patras – Laboratory of Industrial Engineering and Environmental Technology, Greece**

07/2007 – 01/2008 Graduate Lab Assistant

#### **4. PRACTICAL EXPERIENCE**

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**University of Patras – Department of Civil Engineering**

08/2013 – 01/2015 **Design and Research Engineer** in the project:

- 4.1. *Seismic Assessment and Retrofit of the Messenia's Administration Building (reinforced concrete) in City of Kalamata (Greece) according to Eurocodes and the Greek Code for Structural Inventions KANEPE.*

**Engineer Directorate of Hellenic Army**

01/2012 – 10/2012 **Design and Quality/Supervisor Engineer** on structural and architectural projects of Hellenic Army, such as renovation of residences for military officers, construction of athletic facilities, rehabilitation of existing reinforced concrete and steel building structures:

- 4.2. *Retrofitting and Renovation of an Existing Masonry Building in the «Ilarchou Variti» Military Camp for the Construction of Six (6) Officer's Residences*
- 4.3. *Design and Construction of the Fiber Optic Cable Infrastructure and Offices to Support the Digitization of the Hellenic Army Archives*
- 4.4. *Renovation of the Senior Officers' Residences X2 and X3 in the «St. Andrew» Military Camp*
- 4.5. *Construction of the Hospitalization Wards in the Cardiology Clinic NIMTS and Repair of the Central Water Supply, Sewerage System and Pipe Network*
- 4.6. *Upgrade of the Road Network in the «Ilarchou Variti» Military Camp to Accommodate Heavy Military Vehicles*
- 4.7. *Construction of the Athletic Facilities in the «St. Andrew» Military Camp*

**OTE Estate S.A. (Construction and Real Estate Company)**

07/2008 – 07/2011 **Construction Quality/Supervisor Engineer** in the construction site of the project:

- 4.8. *Construction of a complex of shops, offices, food store, cafe-restaurant and residences with underground parking in Tarampoura, Patras, Greece."*

(Contractor Company: J&P Avax – Budget: 21,000,000 € / reinforced concrete structures)

#### **5. PROFESSIONAL AFFILIATIONS/MEMBERSHIP**

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- 5.1. Earthquake Engineering Research Institute (EERI) – 2/2018
- 5.2. International Association for Bridge and Structural Engineering (IABSE) – 5/2015
- 5.3. Architectural Institute of Japan (AIJ) – 2/2015
- 5.4. Greek Society of Civil Engineers – 7/2009
- 5.5. Technical Chamber of Greece (Registered as Professional Engineer) – 3/2008

#### **6. AWARDS – DISTINCTIONS**

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**Excellent Research Lecture/Presentation Award on Conference**

<sup>^</sup>Skalomenos KA, Shimada H, Inamasu H, Kurata M, Nakashima M (2017), An experimental study of the seismic response of BIEs using mechanical pins: In Proceedings of the Annual meeting of the Disaster Prevention Research Institute, DPRI, 21-22 February 2017, Kyoto University, Japan.

**Excellent Graduation Thesis Prize of Architectural Institute of Japan (AIJ)**

Hironari Shimada (2016), 初期偏心とガセットプレートを用いた剛性調律ブレースの開発 (Translation to English: Development of stiffness control steel braces using intentional eccentricity and gusset plates connections), Bachelor thesis, Faculty of Engineering, Kyoto University (co-supervision).

**Japan Society for the Promotion of Science Post-Doctoral Fellowship** April 2015 (among 120 fellows out of 1,139 applicants)

#### **Best Conference Paper Award (2<sup>nd</sup> place)**

Gkatzamanis TC, Skalomenos KA, Assessment and retrofitting of existing R/C building with pilotis using concrete jackets and shear walls: In Proceedings of 13th Undergraduate Conference on Repair and Strengthening of Structures, 21-22 February 2007, Patras, Greece.

#### **Journal Referee**

- Earthquake Engineering and Structural Dynamics, Wiley
- Journal of Structural Engineering, ASCE
- Engineering Structures, Elsevier
- Soil Dynamics and Earthquake Engineering, Elsevier
- The Open Civil Engineering Journal, Bentham Open

### **7. INVITED TALKS**

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- 7.1. “Eccentricity: An Inherent Technology for Steel Braced Structures”, Department of Civil and Environmental Engineering, University of California, Berkeley, February 2018
- 7.2. Invited lecture for undergraduate level class, “Steel Structures II”, Department of Architecture and Architectural Engineering, Kyoto University, October 2017
- 7.3. “Structural systems with enhanced seismic resilience using high-performance steels”, Performance-Based Seismic Design of Structures: Resilience, Robustness, International Workshop, Tongji University, Shanghai, China, October 2017
- 7.4. “Design of composite columns based on EC4 and EC8: Analysis and design principles”, Department of Civil Engineering, National Technology of Athens (NTUA), Greece, September 2017
- 7.5. “Combine what exceptional each country offers”, On the Occasion of Retirement of Prof. Masayoshi Nakashima from Kyoto University, International Symposium, DPRI, Kyoto University, Japan, March 2017
- 7.6. Invited lecture for undergraduate level class, “Steel Structures II”, Department of Architecture and Architectural Engineering, Kyoto University, October 2016
- 7.7. “Model development methodology to simulate the seismic behavior of CFT columns” & “Experimental investigation on a new steel brace named the Brace with Intentional Eccentricity (BIE)”, University of Canterbury, Christchurch, New Zealand, November 2016
- 7.8. “Soil liquefaction and its effects”, Science Dialogue, JSPS Overseas Fellowship Division, Yamashiro High School, Kyoto, Japan, November 2016
- 7.9. “Multi-strength seismic-resistant steel braces with high post-yielding stiffness and large energy dissipation capacity”, Roles of Structural and Geotechnical Earthquake Engineering in Disaster Mitigation, International Workshop, DPRI, Kyoto University, Japan, June 2016
- 7.10. “A new steel brace: Brace with Intentional Eccentricity (BIE)”, DPRI-QuakeCore Student Forum in Earthquake Engineering, International Workshop, DPRI, Kyoto University, Japan, February 2016
- 7.11. “Introduction of new-type low-damage structural members for seismic rehabilitation”, Roles of Structural Engineering for Resilient Society, International Symposium, DPRI, Kyoto University, Japan, May 2015
- 7.12. “Earthquake Engineering: Introduction to Base Isolation”, Science Dialogue, JSPS Overseas Fellowship Division, Wakasa High School, Fukui, Japan, September 2015

- 7.13. Invited lecture for undergraduate level class, “Steel Structures II”, Department of Architecture and Architectural Engineering, Kyoto University, October 2015
- 7.14. “Estimation of seismic drift and ductility demands in composite framed structures: a design approach”, Application of Structural Engineering and Structural Health Monitoring to Historic Buildings in EU and Japan, International Workshop by Young Researchers, DPRI, Kyoto University, Japan, December 2014

## 8. SERVICE INSTITUTIONS AND ADMINISTRATION

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- 8.1. Principal Organizer of the Japan-Greece International Workshop for Young Researchers on Earthquake Engineering: *Advanced Materials and Technology for Applications to Steel and Composite Steel/Concrete Structures*. (Univ. of Bath, Univ. of Leeds, Univ. of Catania, Liverpool J-M University, Hellenic Open University), 7-8/12/2017.
- 8.2. Co-Organizer of International Workshop for Young Researchers on Earthquake Engineering: *Roles of Structural and Geotechnical Earthquake Engineering in Disaster Mitigation* (ETH Zurich, National Technical Univ. of Athens), 12/6/2016.
- 8.3. Participation in organization of International Workshop for: *DPRI – QuakeCoRE student forum in Earthquake Engineering* (QuakeCoRE, Univ. of Auckland, Univ. of Canterbury), 26-27/2/2016.
- 8.4. Participation in organization of IABSE Conference: *Elegance in Structures, Nara, Japan*, 13-15/5/2015.
- 8.5. Member in the *Administrative council* of the Greek Society of Civil Engineers, 08/2013- 01/2015.
- 8.6. Member in the *Central Representative Body* of the Technical Chamber of Greece, 11/2013- 01/2015.
- 8.7. Member in the *Representation of Western Greece branch* of the Technical Chamber of Greece, 04/2010-01/2015.

## 9. RESEARCH PROJECTS

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- Establishment of Relationships with Advanced Technology Industry
  - Application of New Materials and Technology in Engineering Structures and Retrofitting
  - Development of High-Performance Structures for Multi-Objective Resilience-Based Design
  - Effective Experimentation to Evaluate the Structural Performance and Quantify the Collapse Margins
  - Establishment of an International Network of Experts in the Field
- 9.1. *Numerical and Experimental Investigation of the Seismic Performance of Steel Braces with Stronger Middle Length Treated by Induction Hardening*, DPRI (Disaster Prevention Research Institute), New Exploratory Research, FY 2018-2019. Role: **Principal Investigator (PI)**
- 9.2. *International Workshop for Young Researchers*, Future Development Funding Program by the Kyoto University Research Coordination Alliance (KURCA). FY 2018-2019. Role: **Principal Investigator (PI)**
- 9.3. *Collection and Synthesis of Data Regarding Combined Structural and Non-structural Performance and Damage*, Tokyo Metropolitan Resilience Project of the National Research Institute for Earth Science and Disaster Resilience, Theme III (Team Leader M. Kurata): Holistic Assessment of Seismic Damage in Medical Facilities -Evaluation of Special Equipment and Functionality Loss in Disaster Management Base Facilities and E-Defense, PI: Akira Nishitani (Waseda University), FY 2017-2031 Role: **Researcher**
- 9.4. *Ultimate Behavior of New-Type Cold-Formed Hollow Structural Section Columns (Steel BCP 325)*, Scholarship donations by Nippon Steel & Sumitomo Metal Co. Ltd, PI: Masahiro Kurata (Kyoto University), FY 2017-2018. Role: **Co-Investigator (Co-I)**
- 9.5. *Application of Induction Heat (IH) Treatment Technology in Large-Scale Structural Members: Development of High-Performance Steel Braces*, Scholarship donations by Neturen, Co. Ltd, PI: FY 2017-2018. Role: **Co-Investigator (Co-I)**

- 9.6. *International Workshop for Young Researchers in “Advanced Materials and Technology in Steel and Composite Steel/Concrete Structures”*, DPRI (Disaster Prevention Research Institute), Collaborative Research Program - Workshops and Symposia, FY 2017-2018. Role: **Co-Investigator (Co-I)**
- 9.7. *Development of Seismic Retrofit Technique and Design Method Capable of Reducing Local Deformation for Vitalizing Building Stocks*, Japan Society for the Promotion of Science, Grants-in-Aid for Scientific Research, Young Scientific Research A 16H06108, PI: Masahiro Kurata (Kyoto University), FY 2016-2019. Role: **Research Collaborator**
- 9.8. *Seismic Performance of Vintage Japanese Braced-Frame Buildings Before and After Retrofit*, US National Science Foundation (NSF). PI: Andrew Sen (University of Washington), FY 2016. Role: **Research Collaborator**
- 9.9. *Establishment of Design Method for Self-Centering Composite Frames with Double-Skin CFT columns*, Japan Society for the Promotion of Science (JSPS), Grants-in-Aid for Scientific Research, JSPS Post-doctoral Fellowship, Host researcher: Masayoshi Nakashima (Kyoto University), FY 2015-2017 JPY. Role: **Co-Investigator (Co-I)**
- 9.10. *Seismic Assessment and Retrofit of the Administration Building (reinforced concrete) of Messenia Prefecture in City of Kalamata (Greece) according to Eurocodes and the Greek Code for Structural Interventions KANEPE*. Research participants: University of Patras (Dept. of Civil Engineering) and ITSAK - EPPO (Institute of Engineering Seismology and Earthquake Engineering - Earthquake Planning and Protection Organization of Greece). PI: Stavros Anagnostopoulos (University of Patras), FY 2013-2016. Role: **Research Collaborator**

## 10. PUBLICATIONS

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### Doctoral Thesis

Skalomenos KA, Seismic Performance of Plane Moment Resisting Frames with Concrete-Filled Steel Tube Columns and Steel I Beams, Ph.D. Thesis, Department of Civil Engineering, University of Patras, Greece, April 2014, 402 pages (written in English), <http://hdl.handle.net/10889/8442>

### Papers in International Refereed Journals

- J14. Skalomenos KA, Kurata M, Shimada H, Nishiyama M (2018), Use of induction heating in steel structures: material properties and novel brace design, *Journal of Constructional Steel Research*, 148: 112-123, <https://doi.org/10.1016/j.jcsr.2018.05.016>
- J13. Skalomenos KA, Nakashima M, Kurata M (2018), Seismic capacity quantification of gusset-plate connections to fracture for ductility-based design, *Journal of Structural Engineering of ASCE* (in press)
- J12. Hayashi K, Skalomenos KA, Inamasu H, Luo Y-B (2018), Self-centering rocking composite frame using concrete-filled double-skin steel tubular columns and energy dissipating fuses in multiple locations, *Journal of Structural Engineering of ASCE* (in press)
- J11. Skalomenos KA, Kurata M, Nakashima M (2018), On-line hybrid test method for evaluating the performance of structural details to failure, *Earthquake Engineering and Structural Dynamics*, 47(3):555–572, <https://doi.org/10.1002/eqe.2979>
- J10. Serras D, Skalomenos KA, Hatzigeorgiou GD, Beskos DE (2017), Inelastic behavior of circular concrete-filled steel tubes: monotonic versus cyclic response, *Bulletin of Earthquake Engineering*, 15(12):5413-5434, <https://link.springer.com/article/10.1007/s10518-017-0186-7>
- J9. Skalomenos KA, Inamasu H, Shimada H, Nakashima M (2017), Development of a steel brace with intentional eccentricity and experimental validation, *Journal of Structural Engineering of ASCE*, 143(8):04017072, [http://ascelibrary.org/doi/10.1061/\(ASCE\)ST.1943-541X.0001809](http://ascelibrary.org/doi/10.1061/(ASCE)ST.1943-541X.0001809)
- J8. Inamasu H, Skalomenos KA, Hsiao P-C, Hayashi K, Kurata M, Nakashima M (2017), Gusset plate connections for naturally buckling steel braces, *Journal of Structural Engineering of ASCE*, 143(8): 04017065, [http://ascelibrary.org/doi/10.1061/\(ASCE\)ST.1943-541X.0001794](http://ascelibrary.org/doi/10.1061/(ASCE)ST.1943-541X.0001794)

- J7. Serras D, Skalomenos KA, Hatzigeorgiou GD, Beskos DE (2016), Modelling of circular concrete-filled steel tube columns subjected to cyclic lateral loading, *Structures of ICE*, 8(1): 75-93, <https://doi.org/10.1016/j.istruc.2016.08.008>
- J6. Skalomenos KA, Hayashi K, Nishi R, Inamasu H, Nakashima M (2016), Experimental behavior of concrete-filled steel tube columns using ultra-high strength steel, *Journal of Structural Engineering of ASCE*, 142(9):04016057, [http://ascelibrary.org/doi/10.1061/\(ASCE\)ST.1943-541X.0001513](http://ascelibrary.org/doi/10.1061/(ASCE)ST.1943-541X.0001513)
- J5. Kamaris G, Skalomenos KA, Hatzigeorgiou GD, Beskos DE (2016), Seismic damage estimation of in-plane regular steel/concrete composite moment resisting frames, *Engineering Structures*, 115: 67-77, <https://doi.org/10.1016/j.engstruct.2016.01.053>
- J4. Skalomenos KA, Hatzigeorgiou GD, Beskos DE (2015), Seismic behavior of composite steel/concrete MRFs: deformation assessment and behavior factors, *Bulletin of Earthquake Engineering*, 13(12): 3871-3896, <https://link.springer.com/article/10.1007/s10518-015-9794-2>
- J3. Skalomenos KA, Hatzigeorgiou GD, Beskos DE (2015), Application of the hybrid force/displacement (HFD) seismic design method to composite steel/concrete plane frames, *Journal of Constructional Steel Research*, 115: 179-190, <https://doi.org/10.1016/j.jcsr.2015.08.007>
- J2. Skalomenos KA, Hatzigeorgiou GD, Beskos DE (2015), Modelling level selection for seismic analysis of concrete-filled steel tube/moment resisting frames by using fragility curves, *Earthquake Engineering and Structural Dynamics*, 44(2): 199-220, <http://onlinelibrary.wiley.com/doi/10.1002/eqe.2465/full>
- J1. Skalomenos KA, Hatzigeorgiou GD, Beskos DE (2014), Parameter identification of three hysteretic models for the simulation of the response of CFT columns to cyclic loading, *Engineering Structures*, 61, 44-60, <https://doi.org/10.1016/j.engstruct.2014.01.006>

#### Papers in Refereed Conference Proceedings (<sup>^</sup> denotes presenting author)

- C20. <sup>^</sup>Skalomenos KA, Kurata M, Fukutomi Y, Nishiyama M, Evaluation of cyclic behavior of steel braces with stronger middle length treated by induction hardening: In Proceedings of 11<sup>th</sup> NCEE U.S. National Conference on Earthquake Engineering, 25-29 June 2018, Los Angeles
- C19. <sup>^</sup>Serras D, Hatzivassiliou M, Skalomenos KA, Hatzigeorgiou GD, Beskos DE, Three-dimensional composite buildings subjected to repeated earthquakes: In Proceedings of 16<sup>th</sup> ECCE European Conference in Earthquake Engineering, 18-21 June 2018, Thessaloniki, Greece
- C18. <sup>^</sup>Hayashi K, Skalomenos KA, Inamasu H, Seismic performance of a controlled-rocking concrete-filled steel tube/moment resisting frame: In Proceedings of 16<sup>th</sup> ECCE European Conference in Earthquake Engineering, 18-21 June 2018, Thessaloniki, Greece
- C17. <sup>^</sup>Skalomenos KA, Kurata M, Shimada H, Nishiyama M, Braces with intentional eccentricity and partial cross-sectional strength enhancement by quenching: In Proceedings of 16<sup>th</sup> ECCE European Conference in Earthquake Engineering, 18-21 June 2018, Thessaloniki, Greece
- C16. Anagnostopoulos SA, <sup>^</sup>Lekidis V, Skalomenos KA, Morfidis K, Karakostas C, Salonikios T, Seismic assessment and retrofit scenarios for administration building of Kalamata: In Proceedings of 16<sup>th</sup> ECCE European Conference in Earthquake Engineering, 18-21 June 2018, Thessaloniki, Greece
- C15. <sup>^</sup>Skalomenos KA, Shimada H, Kurata M, Nakashima M, On-line testing of brace connections using non-linear substructuring and force-displacement combined control: In Proceedings of 9<sup>th</sup> STESSA, Behavior of Steel Structures in Seismic Areas, 14-17 February 2018, Christchurch, New Zealand
- C14. Kamaris GS, <sup>^</sup>Skalomenos KA, Hatzigeorgiou GD, Beskos DE, An empirical methodology for seismic damage control of CFT-MRFs, In Proceedings of 9<sup>th</sup> STESSA, Behavior of Steel Structures in Seismic Areas, 14-17 February 2018, Christchurch, New Zealand
- C13. Serras D, Skalomenos KA, <sup>^</sup>Hatzigeorgiou GD, Beskos DE, Nonlinear model for circular concrete-filled steel tubes under monotonic loading: In Proceedings of 9<sup>th</sup> Hellenic National Conference of Steel Structures, 5-7 October, 2017, Larisa, Greece

- C12. <sup>^</sup>[Skalomenos KA](#), Shimada H, Kurata M, Nakashima M, Feasibility of hybrid simulation for testing steel connections of braces with intentional eccentricity: In Proceedings of 8<sup>th</sup> EUROSTEEL European conference on Steel and Composite Structures, 13-15 September 2017, Copenhagen, Denmark
- C11. <sup>^</sup>Inamasu H, [Skalomenos KA](#), Hsiao PC, Hayashi K, Kurata M, Nakashima M, Experimental investigation of bolt-configured naturally buckling brace with gusset plate connection: In Proceedings of 16<sup>th</sup> WCEE World Conference on Earthquake Engineering, 9-13 January 2017, Santiago, Chile
- C10. <sup>^</sup>[Skalomenos KA](#), Inamasu H, Shimada H, Nakashima M, Experimental investigation of steel braces installed with intentional eccentricity using gusset plate connections: In Proceedings of 16<sup>th</sup> WCEE World Conference on Earthquake Engineering, 9-13 January 2017, Santiago, Chile
- C9. <sup>^</sup>[Skalomenos KA](#), Inamasu H, Shimada H, Nakashima M, Seismic behavior and physical theory model of a steel brace with intentional eccentricity: In Proceedings of 11<sup>th</sup> PSSC Pacific Structural Steel Conference, 29-31 October 2016, Shanghai, China, 1116-1122
- C8. Kamaris GS, <sup>^</sup>[Skalomenos KA](#), Hatzigeorgiou GD, Beskos DE, Damage evaluation of plane regular CFT-MRFs subjected to far-fault ground motions: In Proceedings of 11<sup>th</sup> PSSC Pacific Structural Steel Conference, 29-31 October 2016, Shanghai, China, 1044-1049
- C7. Kamaris GS, [Skalomenos KA](#), <sup>^</sup>Hatzigeorgiou GD, Beskos DE, Simple expressions for seismic damage assessment of CFT-MRFs: In Proceedings of 11<sup>th</sup> HSTAM International Congress on Mechanics, 27-30 May 2016, Athens, Greece.
- C6. <sup>^</sup>Serras D, [Skalomenos KA](#), Hatzigeorgiou GD, Beskos DE, On the nonlinear cyclic behavior of circular concrete-filled steel tubes: In Proceedings of 8<sup>th</sup> GRACM International Congress on Computational Mechanics, 12-15 July 2015, University of Thessaly, Volos, Greece
- C5. <sup>^</sup>[Skalomenos KA](#), Hatzigeorgiou GD, Beskos DE, A design approach for composite framed structures using the hybrid force/displacement (HFD) seismic method: In Proceedings of 8<sup>th</sup> STESSA International Conference on Behavior of Steel Structures in Seismic Areas, 1-3 July 2015, Tongji University, Shanghai, China, 1458-1465
- C4. <sup>^</sup>Kamaris GS, [Skalomenos KA](#), Hatzigeorgiou GD, Beskos DE, Simple formulae for damage estimation of composite steel/concrete moment resisting frames: In proceedings of 5<sup>th</sup> COMPDYN International conference on Computational Methods in Structural Dynamics and Earthquake Engineering, M. Papadrakakis, V. Papadopoulos, V. Plevris (eds.), 25-27 May 2015, Crete Island, Greece
- C3. <sup>^</sup>[Skalomenos KA](#), Hatzigeorgiou GD, Beskos DE, Seismic yield displacement of composite steel/concrete plane frames: In Proceedings of 8<sup>th</sup> Hellenic National Conference of Steel Structures, 2-4 October 2014, Tripoli, Greece
- C2. <sup>^</sup>[Skalomenos KA](#), Hatzigeorgiou GD, Beskos DE, Modelling of CFT/MRFs using fragility curves: In Proceedings of 7<sup>th</sup> EUROSTEEL European conference on Steel and Composite Structures, 10-12 September 2014, Napoli, Italy
- C1. <sup>^</sup>[Skalomenos KA](#), Hatzigeorgiou GD, Beskos DE, Determination of Bouc-Wen hysteretic model parameters for simulating the seismic behavior of CFT columns: In Proceedings of 10<sup>th</sup> HSTAM International Congress on Mechanics, 25-27 May 2013, Chania, Crete

#### Technical Papers in Conference Proceedings and Workshops

- T27. <sup>^</sup>Shimada H, Inamasu H, [Skalomenos KA](#), Kurata M. Y, Evaluation of the backbone curve equation of steel brace with intentional eccentricity: In 26<sup>th</sup> JSSC (Japan Society of Steel Construction) Proceedings of the Constructional Steel Symposium, Academic Session, Vol 26, 15 -16 November 2018, Tokyo Fashion Town, Tokyo, Japan
- T26. <sup>^</sup>Kurata M, Otsuki Y, [Skalomenos KA](#), Ikeda Y, Seismic performance assessment of expansion joints through shaking table test, Part I: Test plans and results: In Proceedings of the Annual Meeting of the Architectural Institute of Japan, AIJ, 4 - 6 September 2018, Tohoku University, Sendai, Japan

- T25. <sup>^</sup>Otsuki Y, Kurata M, Skalomenos KA, Ikeda Y, Seismic performance assessment of expansion joints through shaking table test, Part II: Development of fragility functions and reliability analysis: In Proceedings of the Annual Meeting of the Architectural Institute of Japan, AIJ, 4 - 6 September 2018, Tohoku University, Sendai, Japan
- T24. <sup>^</sup>Marzano G, Sasaki Y, Skalomenos KA, Kurata M, Multi Retrofitting scenarios with minimal-disturbance arm damper: In Proceedings of the Annual Meeting of the Architectural Institute of Japan, AIJ, 4 - 6 September 2018, Tohoku University, Sendai, Japan
- T23. <sup>^</sup>Skalomenos KA, Shimada H, Kurata M, Steel braces with high-post yielding stiffness and stable compression behavior, Part I: Validation by cyclic testing: In Proceedings of the Annual Meeting of the Architectural Institute of Japan, AIJ, 4 - 6 September 2018, Tohoku University, Sendai, Japan
- T22. <sup>^</sup>Shimada H, Skalomenos KA, Kurata M, Steel braces with high-post yielding stiffness and stable compression behavior, Part II: Design method and analysis: In Proceedings of the Annual Meeting of the Architectural Institute of Japan, AIJ, 4 - 6 September 2018, Tohoku University, Sendai, Japan
- T21. <sup>^</sup>Inada K, Sasaki Y, Skalomenos KA, Kurata M, Experimental investigation of hollow structural section columns subjected to asymmetric loading protocols, Part I: Test plan: In Proceedings of the Annual Meeting of the Architectural Institute of Japan, AIJ, 4 - 6 September 2018, Tohoku University, Sendai, Japan (in Japanese)
- T20. <sup>^</sup>Sasaki Y, Inada K, Skalomenos KA, Kurata M, Experimental investigation of hollow structural section columns subjected to asymmetric loading protocols, Part II: Test results: In Proceedings of the Annual Meeting of the Architectural Institute of Japan, AIJ, 4 - 6 September 2018, Tohoku University, Sendai, Japan (in Japanese)
- T19. Skalomenos KA, <sup>^</sup>Shimada H, Kurata M, Steel braces with intentional eccentricity treated by induction hardening: In Proceedings of the Annual Meeting of the Disaster Prevention Research Institute, DPRI, 20-21 February 2018, Kyoto University, Kyoto, Japan
- T18. <sup>^</sup>Skalomenos KA, Hayashi K, Nakashima M, Rocking frame with high-strength concrete-filled steel tube columns and low-yield steel fuses: In Proceedings of the International Workshop on Advanced Material and Technology for Application to Steel and Composite Steel/Concrete Structures, DPRI, 7-8 December 2017, Kyoto University, Kyoto, Japan
- T17. <sup>^</sup>Otsuki Y, Skalomenos KA, Kurata M, Damage observations of expansion joints based on shake table tests: In Proceedings of the International Workshop on Advanced Material and Technology for Application to Steel and Composite Steel/Concrete Structures, DPRI, 7-8 December 2017, Kyoto University, Kyoto, Japan
- T16. <sup>^</sup>Shimada H, Skalomenos KA, Kurata M, A first application of induction heating (IH) technology to steel braces with intentional eccentricity: In Proceedings of the International Workshop on Advanced Material and Technology for Application to Steel and Composite Steel/Concrete Structures, DPRI, 7-8 December 2017, Kyoto University, Kyoto, Japan
- T15. <sup>^</sup>Takeda T, Skalomenos KA, Shimada H, Kurata M, Nakashima M, Hybrid test of a gusset plate connection intended for steel braces, Part I: Experimental method: In Proceedings of the Annual Meeting of the Architectural Institute of Japan, AIJ, 31 August - 3 September 2017, Hiroshima, Japan No. 22620 (in Japanese)
- T14. <sup>^</sup>Skalomenos KA, Takeda T, Shimada H, Kurata M, Nakashima M, Hybrid test of a gusset plate connection intended for steel braces, Part II: Cyclic behavior: In Proceedings of the Annual Meeting of the Architectural Institute of Japan, AIJ, 31 August - 3 September 2017, Hiroshima, Japan, No. 22621
- T13. <sup>^</sup>Fukutomi Y, Shimada H, Skalomenos KA, Kurata M, Nishiyama M, Nakashima M, Cyclic tests of steel braces with stronger middle portion: In Proceedings of the Annual Meeting of the Architectural Institute of Japan, AIJ, 31 August - 3 September 2107, Hiroshima, Japan, No. 22619 (in Japanese)
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- T5. <sup>^</sup>Skalomenos KA, Inamasu H, Hsiao P-C, Hayashi K, Kurata M, Nakashima M, Experimental investigation on new configurations of naturally buckling braces (NBBs): In Proceedings of the Annual Meeting of the Disaster Prevention Research Institute, DPRI, 23-24 February 2016, Kyoto University, Japan
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- R2. Anagnostopoulos SA, Lekidis V, Morfidis K, Skalomenos KA, Karakostas C, Salonikios T, Antonopoulos T. Investigation of the Seismic Adequacy and Strengthening of the Administration Building of Prefecture of Messinia, Greece: Final Report part 3, March 2015, Department of Civil Engineering, University of Patras and Institute of Engineering Seismology and Earthquake Engineering 110 p. (in Greek)
- R1. Anagnostopoulos SA, Lekidis V, Morfidis K, Skalomenos KA, Karakostas C, Salonikios T, Antonopoulos T. Investigation of the Seismic Adequacy and Strengthening of the Administration

Building of Prefecture of Messinia, Greece: Final Report parts 1 and 2, March 2015, Department of Civil Engineering, University of Patras and Institute of Engineering Seismology and Earthquake Engineering, 141 p. (in Greek)

### Chapters/Papers in Books

- B5. Skalomenos KA, Hatzigeorgiou GD, Beskos DE, Seismic Analysis and Design of Composite Steel/Concrete Building Structures Involving Concrete-Filled Steel Tubular Columns. In: Ptilakis K. (Eds.) *Recent Advances in Earthquake Engineering in Europe*. ECEE. Geotechnical, Geological and Earthquake Engineering, Vol. 46: pp. 387-411. Springer, Cham, 2018
- B4. Skalomenos KA, Shimada H, Kurata M, Nakashima M, On-line testing of brace connections using non-linear substructuring and force-displacement combined control. In: F.M. Mazzolani, G.A. MacRey, G.C. Clifton, (Eds.) *Key Engineering Materials*, Vol. 763: pp. 510-517. Trans Tech Publications, Switzerland, 2018
- B3. Kamaris GS, Skalomenos KA, Hatzigeorgiou GD, Beskos DE, An empirical methodology for seismic damage control of CFT-MRFs. In: F.M. Mazzolani, G.A. MacRey, G.C. Clifton, Editors, (Eds.) *Key Engineering Materials*, Vol. 763: pp. 75-81. Trans Tech Publications, Switzerland, 2018
- B2. Skalomenos KA, Nakashima M, Hayashi K, Inamasu H, Structural systems with enhanced seismic resilience using high-performance steels. In: D. Beskos, Y. Zhou, J. Qian, X. Lu (Eds), Proceedings of the International Workshop on Performance Based Seismic Design of Structures: *Resilience, Robustness*, Tongji University, pp. 94-101. Shanghai, China, October 2017
- B1. Skalomenos KA, Shimada H, Kurata M, Nakashima M, Feasibility of hybrid simulation for testing steel connections of braces with intentional eccentricity. In: D. Jesse, E. Schleidweiler, J. Kraetschell (Eds.) *ce/papers EUROSTEEL*, Vol. 1, Issue 2-3: pp. 522-529. Verlag Ernst & Sohn, Berlin, 2017

## 11. VARIOUS SKILLS

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Languages	Greek (Native) English (Fluent) Japanese (Elementary)
Computer Programs	ABAQUS • OpenSees • SAP2000 • ANSYS • ATENA 3D • RUAUMOKO 2D&3D • GID • FORTRAN • MATLAB • AutoCAD • E-TABS
Lab Experience	Quasi-static testing, Shaking table testing, Hybrid online testing, Substructure-based test methods, Equipment operation control, Test set-up connectivity, Maintenance
Analysis Experience	Advanced finite element analysis, Non-linear modelling of concrete and steel, Fracture simulation and collapse analysis, Seismic hazard and seismic fragility analysis
Master Coursework	Seismic Design of Reinforced Concrete Buildings • Earthquake Engineering and Earthquake Resistant Structures • Retrofit of Existing Structures • Advanced Mechanics of Structures • Dynamic Analysis of Structures by the Finite Element Method • Seismic Design of Steel Structures • Engineering Seismology and the Earthquake Response of Structures • Systems for Seismic Protection of Structures
PhD Coursework	Experimental Methods in Earthquake Engineering • Geotechnical Earthquake Engineering • Soil Dynamics • Deep Supported Excavations/Deep Foundations
Series of Lectures	Basic Seismology for Seismic Hazard Analysis