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## Highlights

- **Carl Zeiss foundation biennial grant, 120,000 euros** (<https://www.carl-zeiss-stiftung.de/themen-projekte/uebersicht-projekte/detail/professur-fuer-natural-hazards-and-structural-resilience> )
- **Teaching innovation award for Experimental seismic assessment of steel members** (2,500euros award, MSc in Natural Hazards and Risk Engineering, Bauhaus University)
- **Best presentation award** for the work “*Structural identification of a 3-story base isolated building using data from full scale push and sudden release tests*” presented at the 11<sup>th</sup> International Conference on Structural Health Monitoring of Intelligent Infrastructure, Concordia University, 8-12 August 2022
- **Guest talk on multi-hazard engineering**, on the **Structural Engineering Channel**, for the **Engineering Management Institute (USA)**: available at [https://engineeringmanagementinstitute.org/tsec-65-performance-based-multi-hazard-design-of-buildings/?fbclid=IwAR3yZEMpulPE9-fnnP31proITuB-V5pt8vJ6R8jDigei\\_mnR6JmIINWVTM](https://engineeringmanagementinstitute.org/tsec-65-performance-based-multi-hazard-design-of-buildings/?fbclid=IwAR3yZEMpulPE9-fnnP31proITuB-V5pt8vJ6R8jDigei_mnR6JmIINWVTM) , youtube: <https://www.youtube.com/watch?v=31O7-DDIEjE>
- **Invited chairperson** in the Eight European and African Conference on Wind Engineering (8EACWE) to be held during 20-23 September 2022 in Bucharest, Romania, and **session moderator** for the conference Building a Resilient Infrastructure, 26 February-2 March 2024, Addis Ababa, Ethiopia.
- **Invited short lectures** at DPRI Kyoto University (2017), University of Southampton (2020), the University of Northern British Columbia (2021), Edinburgh Napier University (2021), and University of South Wales (2019), Bauhaus University (2022, 2023), Addis Ababa University (2024).
- **Recipient of the prestigious Horizon scholarship offered by Concordia University to international researchers for the years 2019-2021** (program title: Multi-hazard design framework and resilience assessment of steel buildings of different occupancies, supervisors Prof. Tirca and Prof. Stathopoulos)
- **Expert in the field of Dynamics of Structures with Applications to Earthquake Engineering**, ‘*Cultore della materia*’, Master in Structural and Geotechnical Engineering, Department of Civil Engineering and Architecture, University of Catania, awarded on November 2013
- **ACM-W Microsoft scholarship** sponsored by Microsoft Research Advanced Technology Labs Europe to attend the Genetic and Evolutionary Computing Conference, 6-10 July 2013, Amsterdam, the Netherlands, awarded on 2013
- **Outstanding reviewer of Soil Dynamics and Earthquake Engineering (for 2017) and reviewer of Earthquake Spectra, Structures, Journal of Wind Engineering and Industrial Aerodynamics, Bulletin of Earthquake Engineering, Journal of Structural Engineering (ASCE) and Structures.**
- **Scholar advisor for the Civil Engineering Association of Concordia University** (American Society of Civil Engineers – ASCE Concordia Student Chapter) and of **the Earthquake Engineering Research Institute Chapter at Concordia University (EERIC)**
- **State Scholarship Foundation for outstanding academic performance (2002-2008)**, Greek Ministry of Education recipient (I.K.Y.)
- **Certificate of participation to the Graduate Seminar in University Teaching**, offered by the Centre for Teaching and Learning at Concordia University

## Experience

- Assistant Professor in Natural Hazards and Structural Resilience** **July 2023-today**  
 Institute of Structural Engineering, Bauhaus University-Weimar, <https://www.uni-weimar.de/en/civil-engineering/structure/lecturers/junior-chairs/>
- Research associate** **Aug 2022-Jun 2023**  
*Development of spinal braced frames and an adapted multihazard assessment framework*, supervisors: Prof. L. Tirca and Prof. T. Stathopoulos, BCEE, Concordia University
- Postdoctoral research fellow** **Apr 2016-Jul 2022**  
*Multi-hazard design framework and resilience assessment of steel buildings of different occupancies*, supervisors: Prof. L. Tirca and Prof. T. Stathopoulos, BCEE, Concordia University, Oct 2019 – July 2022
- Dynamic effects on buildings with base isolation and energy dissipation, including wind and earthquake loads*, supervisors: Prof. L. Tirca and Prof. T. Stathopoulos, BCEE, Concordia University, May 2018 – January 2019
- Seismic Isolation and Energy Dissipation in the Earthquake Resistant Design of Buildings: Modelling, Analysis, Testing, Identification and Monitoring*, supervisor: Prof. G. Oliveto, DICAR, University of Catania, April 2016 – April 2018
- Research project D.P.C- ReLUIS 2014-2018, Line 6: Isolation and energy dissipation**  
 component of the research unit at the University of Catania
- PhD student** **Jan 2013 - Mar 2016**  
 Department of Civil Engineering and Architecture, University of Catania  
 Dissertation: ‘*Dynamic identification of the Augusta hybrid base isolated building using data from full scale push and sudden release tests*’, supervisor: Prof. Giuseppe Oliveto
- Visiting PhD scholar** **Jan - May 2015**  
 University at Buffalo, New York
- Teaching Assistant and exam committee member** **Nov 2013 - Oct 2016**  
 Class: *Dynamics of structures with applications to earthquake engineering*, Master in Structural and Geotechnical Engineering, DICAR, University of Catania
- Thesis Assistant Supervisor** **2014-2015, 2020-today**  
 Panchal A (Jun-Nov 2024) *Performance-based design of tall RC buildings sited in combined seismic and wind environment*. Incoming visiting PhD scholar from the Indian Institute of Technology Gandhinagar.
- Ullah A (ongoing) *Performance-based design and assessment of Steel Moment Resisting Frames under recurring winds and earthquakes*, Master Thesis in Natural Hazards and Risks in Structural Engineering, Bauhaus University Weimar
- Recino Garcias RB (ongoing) *Seismic and wind loading protocols for the assessment of steel braces*, Master Thesis in Natural Hazards and Risks in Structural Engineering, Bauhaus University Weimar
- Dakour M (2022) *Multihazard analysis of low- and mid-rise steel buildings designed following the Canadian regulations*, Master Thesis in Structural Engineering, BCEE, Concordia University
- Chen L, and Wang S (2022) *Design and dynamic response analysis of steel strongback braced frames*, Master Thesis in Structural Engineering, BCEE, Concordia University
- Marino G (2015) *Dynamic response analysis of a residential building isolated at the base* (103 pp, in Italian), Master Thesis in Structural and Geotechnical Engineering, DICAR, University of Catania
- Di Grande M (2014) *Vulnerability analysis and retrofitting of a school gymnasium* (127 pp, in Italian), Master Thesis in Structural and Geotechnical Engineering, DICAR, University of Catania

**Research Assistant****Mar 2010 - Dec 2012**

*Seismic Retrofitting of Buildings using Isolation and/or Energy Dissipation Techniques: Design, Modelling, Identification*, supervisor: Prof. G. Oliveto, DICAR, University of Catania

**Postgraduate Specialization Programme (MEng)****Sept 2008 - Nov 2009**

Earthquake Engineering and Seismic Design of Structures (ASTE), ECTS 'A' (2<sup>nd</sup> student graduate),  
School of Engineering, Aristotle University of Thessaloniki, Greece

**Bachelor and general Master's Degree (BEng, MEng)****Sept 2002 - Apr 2008**

Structural/Civil Engineering, ECTS 'A' (1<sup>st</sup> student graduate),  
School of Engineering, Aristotle University of Thessaloniki, Greece

**Teaching (M. Sc. Natural Hazards and Risks in Structural Engineering, Bauhaus University Weimar)**

**Teaching innovation award - Experimental seismic assessment of steel members** (2<sup>nd</sup> and 4<sup>th</sup> semester)  
Applied structural dynamics (1<sup>st</sup> semester)  
Primary hazards and risks (1<sup>st</sup> semester, Part II: Wind Engineering)  
Assessment of structural performance (3<sup>rd</sup> semester, Part II: Base isolation)  
Special research project: Performance-based assessment of wind-sensitive steel buildings (3<sup>rd</sup> semester)

**Publications – journal papers**

1. Athanasiou A, Tirca L, Stathopoulos T (under review) *Directional alongwind and crosswind effects on the performance of a 15-storey steel braced frame building in seismic environment*. Journal of Wind Engineering and Industrial Aerodynamics, invited paper for Virtual Special Issue Volume of the ICWE16
2. Athanasiou A, Tirca L, Stathopoulos T (2023) *Performance-based wind and earthquake design framework for tall steel buildings with ductile detailing*. Journal of Wind Engineering and Industrial Aerodynamics, 240:105492, Special Issue “Wind intersections: extreme climate, resilience, and energy”, <https://doi.org/10.1016/j.jweia.2023.105492>
3. Athanasiou A, Tirca L, Stathopoulos T (2023) *Performance-based wind and earthquake design framework for tall steel buildings with ductile detailing*. Journal of Wind Engineering and Industrial Aerodynamics, 240:105492, Special Issue “Wind intersections: extreme climate, resilience, and energy”, <https://doi.org/10.1016/j.jweia.2023.105492>
4. Kitayama S, Morales E, Athanasiou A (2023) *Inspection and repair considerations for downtime assessment of seismically isolated buildings*. Soil Dynamics and Earthquake Engineering, 164 (2023) 107618, <https://doi.org/10.1016/j.soildyn.2022.107618>
5. Athanasiou A, Tirca L, Stathopoulos T (2022) *Nonlinear wind and earthquake loads on tall steel braced frame buildings*. ASCE Journal of Structural Engineering, 148(8): 04022098, <https://ascelibrary.org/doi/10.1061/%28ASCE%29ST.1943-541X.0003375>
6. Athanasiou A, Dakour M, Pejmanfar S, Tirca L, Stathopoulos T (2022) *Multihazard performance-based assessment framework for multi-story steel buildings*. ASCE Journal of Structural Engineering, 148(6): 04022054, <https://ascelibrary.org/doi/full/10.1061/%28ASCE%29ST.1943-541X.0003331>
7. Athanasiou A, Oliveto N D, Ponzo F. (2020) *Identification of first and second order models for the superstructure of a base-isolated building using free vibration tests*. Soil Dynamics and Earthquake Engineering, 135, <https://doi.org/10.1016/j.soildyn.2020.106178>
8. Oliveto N D, Athanasiou A (2019). *2D dynamic and earthquake response analysis of hybrid base isolation systems using a convex optimization framework*. Annals of Solid and Structural Mechanics, 11, p. 11–24. <https://doi.org/10.1007/s12356-019-00053-4>

9. Oliveto ND, Markou AA, Athanasiou A (2019). *Modeling of high damping rubber bearings under bidirectional shear loading*. Soil Dynamics and Earthquake Engineering, Special Issue Base Isolation in the Southern EU: Current Status and Research Issues, 118, p. 179-190, <https://doi.org/10.1016/j.soildyn.2018.12.017>
10. Athanasiou A, Oliveto G, Ponzo F (2018). *Baseline correction of digital accelerograms from field testing of a seismically isolated building*. Earthquake Spectra, 34 (2), p. 915-939, <https://doi.org/10.1193/022817EQS040M>
11. Markou A A, Oliveto G, Athanasiou A (2016). *Response simulation of hybrid base isolation systems under earthquake excitation*. Soil Dynamics and Earthquake Engineering, 84, p. 120-133, <https://doi.org/10.1016/j.soildyn.2016.02.003>
12. Oliveto G, Oliveto N D, Athanasiou A (2014). *Constrained optimization for 1-D dynamic and earthquake response analysis of hybrid base-isolation systems*. Soil Dynamics and Earthquake Engineering, 67, p. 44-53, <https://doi.org/10.1016/j.soildyn.2014.08.010>
13. Oliveto G, Athanasiou A, Oliveto N D (2012). *Analytical earthquake response of 1D hybrid base isolation systems*. Soil Dynamics and Earthquake Engineering, 43, p. 1-15, doi: 10.1016/j.soildyn.2012.05.021

#### Publications – discussion papers

14. Athanasiou A, Stathopoulos T, Tirca L. (2020) *Discussion paper on Performance-Based Wind-Resistant Optimization Design for Tall Building Structures by Deng et al.(2019)*. Journal of Structural Engineering, ASCE, 146(8), <https://ascelibrary.org/doi/abs/10.1061/%28ASCE%29ST.1943-541X.0002754>

#### Publications – engineering and academic magazines

15. Athanasiou A (2021) *Trends in engineering – why is everyone talking about performance based multihazard design?*, Insights article, STRUCTURE magazine: <https://www.structuremag.org/?p=18118>
16. Athanasiou A (2021) *Too little, too late? The devastating consequences of natural disasters must inform building codes*, The Conversation, <https://theconversation.com/too-little-too-late-the-devastating-consequences-of-natural-disasters-must-inform-building-codes-157032>

#### Publications – book chapters

17. Dakour M, Athanasiou A, Tirca L, Stathopoulos T (to appear) *Inelastic seismic behaviour of torsionally sensitive steel braced frame buildings*, Springer.
18. Athanasiou A, Dakour M, Tirca L, Stathopoulos T (2023) *Wind hazard on earthquake damaged buildings.*, Proceedings in Civil Engineering, ce/papers, 6(3-4):2394-2399, Ernst&Sohn, Wiley.
19. Serras D N, Athanasiou A (2022) *Performance Assessment of a Steel Wind Turbine Tower Subjected to Repeated Earthquakes*. In: Mazzolani, F.M., Dubina, D., Stratan, A. (eds) Proceedings of the 10<sup>th</sup> International Conference on Behaviour of Steel Structures in Seismic Areas. STESSA 2022. Lecture Notes in Civil Engineering, vol 262. Springer, Cham.
20. Chen L, Wang S, Athanasiou A, Tirca L (2022). *Feasibility of Strongback System in Storey Mechanism Mitigation of Steel Braced Frames*. In: Mazzolani, F.M., Dubina, D., Stratan, A. (eds) Proceedings of the 10<sup>th</sup> International Conference on Behaviour of Steel Structures in Seismic Areas. STESSA 2022. Lecture Notes in Civil Engineering, vol 262. Springer, Cham.

21. Markou A A, Oliveto N D, Athanasiou A (2017) *Modeling of high damping rubber bearings*, Chapter 7, 25 pages, Ed: A G Sextos and G D Manolis. *Dynamic Response of Infrastructure to Environmentally-Induced Loads: Analysis, Measurements, Testing and Design*, Springer, Cham, Switzerland
22. Pehlivan M, Athanasiou A, Pasupuleti VDK (2014) *Seismic action plan for historical city center of Lisbon, 'Lisbon in Motion Workshop'*, Chapter 7, Costa AA, Ferreira MA, Carvalho A, Oliveira C, Lopes I, Gomes RC(eds) SPES (Sociedade Portuguesa de Engenharia Sismica), p.71-90, ISBN: 978-989-20-5085-0
23. Athanasiou A, De Felice M, Oliveto G, Oliveto P S (2013) *Dynamical modeling and parameter identification of seismic isolation systems by Evolution Strategies*. In: Madani K, Dourado A, Rosa A, Filipe J (eds) *Computational Intelligence. Studies in Computational Intelligence*, vol 465. Springer, Berlin, Heidelberg
24. Oliveto G, Athanasiou A (2012) *Upper and lower bounds for the parameter vector in dynamic identification of hybrid base isolation systems. Lezioni dai terremoti: Fonti di Vulnerabilità, Nuove Strategie Progettuali, Sviluppi Normativi*, a cura di Raffaele Nudo (editor). Firenze University Press, Florence, p. 247-256, ISBN: 978-88-6655-069-3

#### Publications – selected conference proceedings

25. Athanasiou A (2024) *Inelastic response of bilinear sdof systems under strong wind and earthquake excitation*. 18WCEE: 18<sup>th</sup> World Conference on Earthquake Engineering, Milan, Italy.
26. Athanasiou A, Tirca L, Stathopoulos T (2024) *Scaling wind loads for Incremental Dynamic Analysis applications*. BBAA IX:9<sup>th</sup> International Colloquium on Bluff Body Aerodynamics and Applications University of Birmingham, Birmingham, UK.
27. Dakour M, Tirca L, Athanasiou A, Stathopoulos T (2024) *Assessment of collapse safety of torsionally sensitive steel buildings under biaxial excitation*. 18WCEE: 18<sup>th</sup> World Conference on Earthquake Engineering, Milan, Italy.
28. Athanasiou A, Tirca L, Stathopoulos T (2023) *The acrosswind effect on the performance-based assessment of tall steel buildings in multi-hazard environment*. ICWE16: 16th International Conference on Wind Engineering, Florence, Italy, *Invited for inclusion in the dedicated Virtual Special Issue of Elsevier's Journal of Wind Engineering and Industrial Aerodynamics*
29. Athanasiou A, Tirca L, Stathopoulos T (2020) *Dynamic response of inelastic fixed-base and base-isolated steel structures under wind and earthquake*. 17WCEE: 17<sup>th</sup> World Conference on Earthquake Engineering, Sendai, Japan.
30. Athanasiou A, Tirca L, Stathopoulos T (2019) *Wind and earthquake effects on the nonlinear response of steel braced frame buildings*. 12CCEE: 12<sup>th</sup> Canadian Conference on Earthquake Engineering, June 17-20, Château Frontenac, Québec, Canada.
31. Athanasiou A, Stathopoulos T, Tirca L (2019) *Preliminary multi-hazard assessment of mid-rise buildings*. Proceedings of the 27<sup>th</sup> CANCAM, May 27 – 30, Sherbrooke, Québec, Canada.
32. Athanasiou A, Oliveto G (2018). *Superstructure mode identification in a base isolated building from push and sudden release tests*. 16ECEE: 16<sup>th</sup> European Conference on Earthquake Engineering, 18-21 June 2018, Thessaloniki, Greece

33. Athanasiou A, Oliveto G (2017) *Observations from full scale push and sudden release tests on a RC building seismically isolated at the base*. 1st Japan-Greece International Workshop by Young Researchers on Advanced Materials and Technology for Applications to Steel and Composite Steel/Concrete Structures, DPRI Kyoto University, December 7, 2017
34. Athanasiou A, Oliveto G (2017) *Correction of acceleration records obtained from free vibration tests on base isolated buildings*. 16WCEE: 16<sup>th</sup> World Conference on Earthquake Engineering, 9-13 January 2017, Santiago, Chile
35. Oliveto G, Athanasiou A, Markou AA, Marino G, Oliveto ND (2017) *System identification and response simulation of reinforced concrete buildings seismically retrofitted by base isolation*. 16WCEE: 16th World Conference on Earthquake Engineering, 9-13 January 2013, Santiago, Chile
36. Oliveto G, Athanasiou A (2014) *Simulation of the response of a hybrid base-isolated building during push and quick-release tests*. 2ECEES: 2<sup>nd</sup> European Conference on Earthquake Engineering and Seismology, 25-29 August 2014, Istanbul, Turkey
37. Oliveto G, Athanasiou A (2013) *Mixed Lagrangian Formulation for the dynamic response of base isolated buildings to earthquake excitation*. AIMETA 2013 - XXI Congresso Nazionale dell'Associazione Italiana di Meccanica Teorica e Applicata, 17-20 September 2013, Torino, Italy
38. Athanasiou A, Oliveto G, Takayama M, Morita K (2013) *Problems in the identification of base isolation systems from earthquake records*. GECCO '13 Companion. Copyright 2013 ACM 978-1-4503-1964-5/13/07. 6-10 July 2013, Amsterdam, The Netherlands
39. Oliveto G, Athanasiou A, Granata M (2013) *Blind simulation of full scale free vibration tests on a three story base isolated building*. 10CUEE: 10<sup>th</sup> International Conference on Urban Earthquake Engineering, 1-2 March 2013, Tokyo Institute of Technology, Japan, p. 1303-1316
40. Oliveto G, Athanasiou A, Takayama M, Morita K (2013) *A preliminary study on the identification of seismic isolation systems from earthquake records*. 10CUEE: 10<sup>th</sup> International Conference on Urban Earthquake Engineering, 1-2 March 2013, Tokyo Institute of Technology, Japan, p. 1415-1424
41. Oliveto ND, Athanasiou A, Oliveto G (2012) *Mixed Lagrangian Formulation for dynamic and earthquake response of 2D hybrid base isolation systems*. 9CUEE & 4ACEE Joint Conference: 9<sup>th</sup> International Conference on Urban Earthquake Engineering & 4<sup>th</sup> Asia Conference on Earthquake Engineering, 6-8 March 2012, Tokyo Institute of Technology, Japan, p. 1373-1382
42. Athanasiou A, De Felice M, Oliveto G, Oliveto P S (2011) *Evolutionary algorithms for the identification of structural systems in earthquake engineering*. ECTA 2011: International Conference on Evolutionary Computation Theory and Applications, 24-26 October 2011, Paris, France, p. 52-62
43. Athanasiou A, Oliveto G (2011). *Modelling hybrid base isolation systems for free vibration simulations*. 8CUEE: 8<sup>th</sup> International Conference on Urban Earthquake Engineering, Tokyo Institute of Technology, 7-8 March 2011, Japan, p. 1293-1302

#### Publications – technical reports

44. Oliveto G, Athanasiou A, Marino G, Granata M, Markou A, Oliveto ND (2018) *Modeling of high damping rubber bearings under bidirectional shear loading (in Italian)*. D.P.C- ReLUI5 2014-2018, Line 6: Isolation and energy dissipation, Coordinators: Ponzio F C and Serino G

45. Oliveto G, Athanasiou A, Marino G, Granata M, Markou A, Oliveto ND (2018) *Displacement demand of symmetric double concave curved sliders (in Italian)*. D.P.C- ReLUIIS 2014-2018, Line 6: Isolation and energy dissipation, Coordinators: Ponzo F C and Serino G
46. Oliveto G, Athanasiou A, Marino G, Granata M, Markou A, Oliveto ND (2018) *Displacement demand of the Solarino buildings (in Italian)*. D.P.C- ReLUIIS 2014-2018, Line 6: Isolation and energy dissipation, Coordinators: Ponzo F C and Serino
47. Oliveto G, Athanasiou A, Marino G, Granata M, Markou A, Oliveto ND (2016) *On the seismic retrofitting of the Solarino buildings (in Italian)*. D.P.C- ReLUIIS 2014-2018, Line 6: Isolation and energy dissipation, Coordinators: Ponzo F C and Serino G

### Memberships

- **Order of Engineers of Quebec, Canada**
- American Society of Civil Engineers, ASCE (since 2018)
- American Association for Wind Engineering, ASEE (since 2024)
- American Society for Engineering Education, ASEE (since 2020)
- Canadian Association for Earthquake Engineering and Seismology (since 2022)
- Canadian Association of Postdoctoral Scholars / l'Association Canadienne des Stagiaires Postdoctoraux CAPS/ACSP (since 2018)
- Society for Earthquake and Civil Engineering Dynamics, SECED (since 2017)
- Earthquake Engineering Research Institute, EERI (since 2015)
- ACM association for Women in Computing, ACM-W (since 2013)
- Technical Chamber of Greece, TEE (2008-2017)

### Computer skills

MATLAB, OpenSees, SAP2000, ETABS, LaTeX, AutoCAD, SeismoSignal, SOFiSTiK, MS Office, OpenStreetMap

### Language skills

Greek (native speaker), English (C2), Italian (C1), **French (B2-C1)**, German (beginner), Spanish (beginner)

### Volunteering (2020-2023, Montreal, Qc)

- Cooking and serving food, distributing clothes at the Resilience shelter and wellness centre
- Math tutor for adult college students, Frontier College: a national charitable literacy organization

**CONFIRMATION OF CANADIAN PERMANENT RESIDENCY RECEIVED.**