

## Curriculum Vitae

### Personal Information

**Last Name** : Genikomsou  
**First Name** : Aikaterini  
**Position** : Assistant Professor



**Academic Field** :

**Work Address** : International Hellenic University  
Alexander Campus / School of Engineering  
Department of Environmental Engineering, P.O. Box 141, 574 00,  
Thessaloniki, Greece

**Research Interests** : Reinforced Concrete Structures, Earthquake Resistant Structures,  
Nonlinear Finite Element Analysis

**Contact Details:** : **tel.:** **e-mail:** aikaterini.genikomsou@queensu.ca

**Personal Website** :

### Education

2003-2008 Diploma in Environmental Engineering (5-year degree), Department of Environmental Engineering, Democritus University of Thrace, Xanthi, Greece.

2008-2011 Diploma in Civil Engineering (5-year degree), Department of Civil Engineering, Democritus University of Thrace, Xanthi, Greece.

2009-2011 M.Sc. in Civil Engineering, Department of Civil Engineering, Democritus University of Thrace, Xanthi, Greece. Program entitled: "Advanced Materials and Novel Technologies in Design of Reinforced Concrete Structures".

2012-2015 Ph.D. in Civil Engineering, Department of Civil & Environmental Engineering, University of Waterloo, Ontario, Canada.

### Professional Experience

2012-2015 Doctoral Researcher, Department of Civil and Environmental Engineering, University of Waterloo, Ontario, Canada.

2016-2017 Postdoctoral Researcher, Department of Civil and Environmental Engineering, University of Waterloo, Ontario, Canada.

2017-2023 Assistant Professor, Department of Civil Engineering, Queen's University, Ontario, Canada.

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2020-present Adjunct Professor, Department of Civil Engineering, York University, Ontario, Canada.

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2023-present Associate Professor, Department of Civil Engineering, Queen's University, Ontario, Canada.

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## Teaching Experience

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### A. Undergraduate

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2017-present Department of Civil Engineering, Queen's University, Ontario, Canada.

- Structural Analysis
  - Reinforced Concrete Design
  - Steel Structures
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### B. Supervision of Undergraduate Theses

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2017-present Supervision of 11 Undergraduate Theses, Department of Civil Engineering, Queen's University, Ontario, Canada.

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### C. Graduate

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2017-present Department of Civil Engineering, Queen's University, Ontario, Canada.

- Advanced Reinforced Concrete
  - Finite Element Analysis
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### D. Supervision of Graduate Theses

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2017-present Supervision of 4 MSc Theses, Department of Civil Engineering, Queen's University, Ontario, Canada.

2023-present Supervision of 2 MSc Theses, Graduate Program «Earthquake Engineering and Seismic Resistant Structures», Hellenic Open University

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### E. Supervision of PhD Theses

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2017-present Supervision of 3 PhD Theses, Department of Civil Engineering, Queen's University, Ontario, Canada.

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### F. Member of Advisory Committee for Doctoral Dissertations

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2017-present Member of the Examination Committee of 10 PhD Theses.

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## Administrative Work

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2017-2018 Representative of Civil Engineering Department at QUFA (Queen's University Faculty Association) Council

2017-2022 Chair of Computing Committee, Department of Civil Engineering, Queen's University, Ontario, Canada.

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2017-2022 Library Representative, Department of Civil Engineering, Queen's University, Ontario, Canada.

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2018-2022	Liaison of Gender Equity Committee, Department of Civil Engineering, Queen's University, Ontario, Canada.
2018-present	Faculty advisor of ACI Student Chapter Queen's University
2018-2022	Graduate Scholarship Committee member, Department of Civil Engineering, Queen's University, Ontario, Canada.
2018-2019	Renewal-Tenure-Promotions Committee, Department of Civil Engineering, Queen's University, Ontario, Canada.
2018-2020	2nd year faculty advisor, Department of Civil Engineering, Queen's University, Ontario, Canada.
2020-2022	3rd year faculty advisor, Department of Civil Engineering, Queen's University, Ontario, Canada.
2020-2021	Appointments Committee, Department of Civil Engineering, Queen's University, Ontario, Canada.
2019-2021	Queen's University Major Admission Award Committee member

### Participation in Councils and Committees

2018-2020	Reviewer for Discovery Grant (2018-2019), (2019-2020): Natural Sciences and Engineering Research Council of Canada (NSERC)
2020-2023	Member of the evaluation committee for CREATE Grant, Natural Sciences and Engineering Research Council of Canada (NSERC) (Chair of the committee for 2023) <a href="https://www.nserc-crsng.gc.ca/NSERC-CRSNG/committees-comites/CREATE-FONCER_eng.asp">https://www.nserc-crsng.gc.ca/NSERC-CRSNG/committees-comites/CREATE-FONCER_eng.asp</a>
2020-2022	Member of the ACI Committee on Awards for Papers (CAP) Subcommittee SC3, Mete A. Sozen Award for Excellence in Structural Research
2021-2023	Member of the Casimir Gzowski medal committee CSCE for technical paper awards (2021-2023) CG medal is awarded annually for best civil engineering paper in surveying, structural engineering or heavy construction.
2021-present	Chair of ACI 421 Committee

### Research Projects

#### A. Principal Investigator

##### I. International

1. 2017-2022 Title: Research Initiation Grant  
Funding Agency: Queen's University  
Budget:  
\$70,000

2.	2017-2024	Title: Performance evaluation of High-Performance Fiber-Reinforced Cementitious Composite slab-column connections Funding Agency: NSERC Discovery Grant ( <a href="https://www.nserc-crsng.gc.ca/professors-professeurs/grants-subs/dgigp-psigp_eng.asp">https://www.nserc-crsng.gc.ca/professors-professeurs/grants-subs/dgigp-psigp_eng.asp</a> ) Budget: \$154,000
3.	2019-2020	Title: Seismic behaviour of retrofitted continuous concrete slabs Funding Agency: Ontario Ministry of Research Innovation and Science contribution (CFI match) Budget: \$150,000
4	2019-2020	Title: Seismic behaviour of retrofitted continuous concrete slabs Funding Agency: CFI John R. Evans Leader Fund ( <a href="https://www.innovation.ca/awards/john-r-evans-leaders-fund">https://www.innovation.ca/awards/john-r-evans-leaders-fund</a> ) Budget: \$150,000
5	2019-2020	Title: Seismic behaviour of retrofitted continuous concrete slabs Funding Agency: Queen's University (CFI match) Budget: \$75,000
6	2019-2020	Title: Analysis of concrete water tanks towards the new developed CSA design provisions Funding Agency: NSERC Engage Grant ( <a href="https://www.nserc-crsng.gc.ca/professors-professeurs/rpp-pp/engage-engagement_eng.asp">https://www.nserc-crsng.gc.ca/professors-professeurs/rpp-pp/engage-engagement_eng.asp</a> ) Budget: \$25,000
7	2023	Title: Finite element analysis of Ultra High-Performance Fiber Reinforced Concrete (UHPFRC) Funding Agency: Mitacs Globalink Grant ( <a href="https://www.mitacs.ca/our-programs/globalink-research-internship-students/">https://www.mitacs.ca/our-programs/globalink-research-internship-students/</a> ) Budget: \$6,000
8	2024	Title: Seismic performance of reinforced concrete slab-to-wall connections using 3D nonlinear finite element methods Funding Agency: Mitacs Globalink Grant ( <a href="https://www.mitacs.ca/our-programs/globalink-research-internship-students/">https://www.mitacs.ca/our-programs/globalink-research-internship-students/</a> ) Budget: \$6,000
9	2024-2029	Title: Smart materials and technologies towards resilient and sustainable concrete structures Funding Agency: NSERC Discovery Grant ( <a href="https://www.nserc-crsng.gc.ca/professors-professeurs/grants-subs/dgigp-psigp_eng.asp">https://www.nserc-crsng.gc.ca/professors-professeurs/grants-subs/dgigp-psigp_eng.asp</a> ) Budget: \$180,000

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## B. Research Team Member

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### I. International

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1. 2020-2023 Title: Enhancing the design of connections for fire resiliency  
Research Team: Genikomsou Aikaterini (PI), Gales John (co-PI)  
Funding Agency: CISC (Canadian Institute for Steel Construction)  
(<https://www.cisc-icca.ca/>)  
Budget: \$20,000

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2. 2020-2023 Title: Enhancing the design of connections for fire resiliency  
Research Team: Genikomsou Aikaterini (PI), Gales John (co-PI)  
Funding Agency: NSERC Alliance Grant ([https://www.nserc-crsng.gc.ca/innovate-innover/alliance-alliance/index\\_eng.asp](https://www.nserc-crsng.gc.ca/innovate-innover/alliance-alliance/index_eng.asp))  
Budget: \$40,000

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3. 2021-2022 Title: System-level Multi-element Analysis of Structures using Hybrid-simulation (SMASH) Lab  
Research Team: Joshua Woods (PI), Genikomsou Aikaterini (co-PI), Amir Fam (co-PI), Mark Green (co-PI), Neil Hault (co-PI), Ian Moore (co-PI), Colin MacDougall (co-PI)  
Funding Agency: NSERC RTI (Research Tools and Instruments) Grant  
([https://www.nserc-crsng.gc.ca/professors-professeurs/rtii-oiri/rti-oir\\_eng.asp](https://www.nserc-crsng.gc.ca/professors-professeurs/rtii-oiri/rti-oir_eng.asp))  
Budget: \$150,000

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4. 2022-2023 Title: Real-time Digital Image Correlation System for the Evaluation of Critical Infrastructure Assets  
Research Team: Joshua Woods (PI), Genikomsou Aikaterini (co-PI), Amir Fam (co-PI), William Take (co-PI), Neil Hault (co-PI), Ian Moore (co-PI), Colin MacDougall (co-PI)  
Funding Agency: NSERC RTI (Research Tools and Instruments) Grant  
([https://www.nserc-crsng.gc.ca/professors-professeurs/rtii-oiri/rti-oir\\_eng.asp](https://www.nserc-crsng.gc.ca/professors-professeurs/rtii-oiri/rti-oir_eng.asp))  
Budget: \$150,000

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5. 2023-2025 Title: Deterioration, Rehabilitation, Assessment, and Improved design of Pipes (DRAIN Pipes)  
Research Team: Ian Moore (PI), Genikomsou Aikaterini (co-PI), Neil Hault (co-PI), Fady Badran Abdelaal (co-PI)  
Funding Agency: NSERC Alliance Grant ([https://www.nserc-crsng.gc.ca/innovate-innover/alliance-alliance/index\\_eng.asp](https://www.nserc-crsng.gc.ca/innovate-innover/alliance-alliance/index_eng.asp))  
Budget: \$300,000

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### Publications in Scientific Journals (peer reviewed)

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1. 2015 **Genikomsou A.S.,** Polak M.A. (2015). "Finite Element Analysis of Punching Shear of Concrete Slabs using Damaged Plasticity Model in ABAQUS", Engineering Structures, Elsevier, 98(4):38-48.
  2. 2015 Balomenos G.P., **Genikomsou A.S.,** Polak M.A., Pandey M.D. (2015). "Efficient method for probabilistic finite element analysis with application to reinforced concrete slabs", Engineering Structures, Elsevier, 103(8):85-101.
  3. 2016 **Genikomsou A.S.,** Polak M.A. (2016). "Finite Element Analysis of reinforced concrete slabs with punching shear reinforcement", ASCE Journal of Structural Engineering. 142 (12), 04016129.
  4. 2017 **Genikomsou A.S.,** Polak M.A. (2017). "3D Finite element investigation of the compressive membrane action effect in reinforced concrete flat slabs", Engineering Structures, Elsevier, 136(13):233-244.
  5. 2017 **Genikomsou A.S.,** Polak M.A. (2017). "3-D Finite Element investigation of Punching Shear using ABAQUS", American Concrete Institute Special Publication (ACI SP-315) Punching shear of structural concrete slabs, 101-116.
  6. 2017 **Genikomsou A.S.,** Polak M.A. (2017). "Opening effect on punching shear strength of RC slabs - Finite element investigation", ACI Structural Journal, 114(5):1249-1261.
  7. 2017 Balomenos G.P., **Genikomsou A.S.,** Pandey M.D., Polak M.A. (2017). "Probabilistic finite element analysis of interior reinforced concrete flat slabs", American Concrete Institute Special Publication (ACI SP-321-2) Recent Developments in Two-Way Slabs: Design, Analysis, Construction, and Evaluation, 2.1-2.16.
  8. 2017 **Genikomsou A.S.,** Polak M.A. (2017). "Finite Element Analysis of RC Flat Slabs with Different Amount and Placement of Shear Bolts", American Concrete Institute Special Publication (ACI SP-321-6) Recent Developments in Two-Way Slabs: Design, Analysis, Construction, and Evaluation, 6.1-6.19.
  9. 2018 Balomenos G.P., **Genikomsou A.S.,** Polak M.A. (2018). "Investigation of the effect of openings of interior RC slabs", Structural Concrete, Wiley, 19 (6), 1672-1681.
  10. 2018 Wosatko A., **Genikomsou A.S.,** Pamin J., Polak M.A., Winnicki A. (2018). "Examination of two regularized damage-plasticity models for concrete with regard to crack closing", Engineering Fracture Mechanics, Elsevier, 194(14):190-211.
  11. 2018 **Genikomsou A.S.,** Milligan G., Polak M.A. (2018). "Modeling parameters in Punching Shear Finite Element Analysis of Concrete Slabs", American Concrete Institute Special Publication (ACI SP-328-12) Shear in Structural Concrete, 12.1-12.23.
  12. 2018 **Genikomsou A.S.,** Balomenos G.P., Arczewska P., Polak M.A. (2018). "Transverse shear testing of GFRP bars with reduced cross-sections", ASCE Journal of Composites for Construction 22(5) 04018041.
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13.	2019	Carter J., <b>Genikomsou A.S.</b> (2019). "Finite element analysis of basalt FRP reinforced concrete beams failed in shear", <i>Frontiers of Structural and Civil Engineering</i> , Springer, 13(6): 1520-1530.
14.	2020	Gill A., <b>Genikomsou A.S.</b> (2020). "Reconnaissance of buildings impacted by the 2018 tornadoes in Ottawa, Canada", <i>ASCE, Journal of Performance of Constructed Facilities</i> , 34(4).
15.	2020	Menna D., <b>Genikomsou A.S.</b> (2020). "Punching shear response of concrete slabs strengthened with Ultra High-Performance Fiber Reinforced Concrete (UHPFRC) using finite element methods", <i>ASCE, Practice Periodical on Structural Design and Construction</i> , 26(1).
16.	2021	Boules P., Fam A., <b>Genikomsou A.S.</b> (2021). "Concrete Floor with GFRP Embedded I-Beams and Stay-In-Place Structural Forms", <i>ASCE Journal of Composites for Construction</i> , 25(2): 04020089: 10.1061/(ASCE)CC.1943-5614.0001109.
17.	2021	Gill A., <b>Genikomsou A.S.</b> , Balomenos G.P. (2021). "Fragility assessment of wood sheathing panels and roof to wall connections subjected to wind loading" <i>Frontiers of Structural and Civil Engineering</i> , Springer, <a href="https://doi.org/10.1007/s11709-021-0745-5">https://doi.org/10.1007/s11709-021-0745-5</a> .
18.	2021	Yang Y., Massicotte B., <b>Genikomsou A.S.</b> , Pantazopoulou S.J., Palermo D. (2021). "Comparative Investigation on Tensile Behaviour of UHPFRC", <i>Springer, Materials and Structures</i> , 54, 147 (2021). <a href="https://doi.org/10.1617/s11527-021-01747-1">https://doi.org/10.1617/s11527-021-01747-1</a> .
19.	2021	de Sousa A.M.D., Lantsoght E.O.L., <b>Genikomsou A.S.</b> , Krahl P.A., El Debs M.K. (2021). "Behavior and punching capacity of flat slabs with rational use of UHPFRC: NLFEA and analytical predictions", <i>Engineering Structures</i> , Elsevier, 244
20.	2021	Panahi H., <b>Genikomsou A.S.</b> (2021). "Comparative Evaluation of Concrete Constitutive Models in Non-linear Finite Element Simulations of Slabs with Different Flexural Reinforcement Ratios", <i>Engineering Structures</i> , Elsevier. 252
21.	2017	Panahi H., <b>Genikomsou A.S.</b> (2022). "Comparative investigation of concrete plasticity models for nonlinear finite element analysis of reinforced concrete specimens", <i>ASCE, Practice Periodical on Structural Design and Construction</i> .
22.	2019	Menna D., <b>Genikomsou A.S.</b> , Green M. (2022). "Compressive and cyclic flexural response of double-hooked-end steel fiber reinforced concrete", <i>Frontiers of Structural and Civil Engineering</i> , Springer. <a href="https://doi.org/10.1007/s11709-022-0845-x">https://doi.org/10.1007/s11709-022-0845-x</a>
23.	2019	Menna D., <b>Genikomsou A.S.</b> , Green M. (2022). "The effect of temperature aging on cyclic properties and bond-slip characteristics of coldworked super elastic NiTi alloy fibers embedded in concrete", <i>Construction and Building Materials</i> , Elsevier, 361, 129630.
24.	2022	Vargas D., Lantsoght E.O.L., <b>Genikomsou A.S.</b> (2022). "Flat slabs in eccentric punching shear: experimental database and code analysis", <i>Buildings</i> , 12(12), 2092; <a href="https://doi.org/10.3390/buildings12122092">https://doi.org/10.3390/buildings12122092</a> .

25.	2023	Jackson R., Moore I., <b>Genikomsou A.S.</b> (2023). "A Linear Elastic Design Model for Sprayed Liners in Damaged Reinforced Concrete Pipes", <i>Tunnelling and Underground Space Technology</i> , Elsevier, 132, 104901.
26.	2023	Boules P., <b>Genikomsou A.S.</b> , Jawdhari A., Fam A. (2023). "Modeling of a Concrete Floor Incorporating GFRP Stay-in-Place Structural Form", <i>Engineering Structures</i> , Elsevier, 278, 115513.
2.	2023	Boules P., Fam A., <b>Genikomsou A.S.</b> (2023). "Bonded Connections of Pultruded Sections for Floor System Studied using", <i>Composites Part B: Engineering</i> , Elsevier, 256, 110665.
28.	2023	Boules P., Fam A., <b>Genikomsou A.S.</b> (2023). "Punching Shear of Flat Slabs with GFRP Stay-in-Place Structural Forms", <i>ASCE Journal of Composites for Construction</i> , 27(4).
29.	2023	Panahi H., <b>Genikomsou A.S.</b> (2023). "A Machine-Learning-based Model for Seismic Performance Assessment of Interior Slab-Column Connections", <i>Soil Dynamics and Earthquake Engineering</i> , Elsevier, 171, 107943.
30.	2023	de Sousa A.M.D., Lantsoght E.O.L., <b>Genikomsou A.S.</b> , Prado L.P, El Debs M.K. (2023). "NLFEA of one-way slabs in transition between shear and punching: recommendations for modeling", <i>Engineering Structures</i> , Elsevier, 293, 116617.
31.	2023	Jackson R., <b>Genikomsou A.S.</b> Moore I. "The Impact of the Nonlinear Concrete Behaviour on the Required Liner Thicknesses of Spray-Repaired Concrete Pipes", <i>Engineering Structures</i> , Elsevier, 296, 116949.
32.	2023	Menna D., <b>Genikomsou A.S.</b> , Green M. "Flexural performance and crack closing capacity of double-hooked-end superelastic shape memory alloy fibre reinforced concrete beams under cyclic loading", <i>Construction and Building Materials</i> , Elsevier, 409, 133744.
33.	2024	<b>Genikomsou A.S.</b> "Seismic Damage Assessment of Reinforced Concrete Slab-Column Connections—Review of Test Data, Code Provisions and Analytical Models", <i>Buildings</i> , 14(2), 465.

### Publications in Scientific Conference Proceedings (peer reviewed)

#### A. International

1.	2014	<b>Genikomsou A.S.</b> , Polak M.A. (2014). "Finite Element Analysis of Punching Shear in Flat Slabs using ABAQUS", <i>Structures Congress 2014</i> , SEI of ASCE, April 3-5, 2014, Boston, Massachusetts, USA, pp. 813-823.
2.	2014	<b>Genikomsou A.S.</b> , Polak M.A. (2014). "FEA of RC Slabs under static and cyclic loading based on damage plasticity model", <i>8th International Conference, AMCM 2014 (16-18 June 2014)</i> , Wroclaw, Poland.
3.	2015	Wosatko A., <b>Genikomsou A.S.</b> , Pamin J., Polak M.A, Winnicki A. (2015). "Incorporation of crack closure effect in damage-plasticity models", paper for the PCM-CMM-2015-3rd Polish Congress of Mechanics & 21st Computer Methods in Mechanics, September 8th-11th 2015, Gdansk, Poland.



4.	2016	<b>Genikomsou A.S.</b> , Polak M.A. (2016). "Damaged plasticity modeling of concrete in finite element analysis of reinforced concrete slabs", IA-FraMCoS (9th International Conference on Fracture Mechanics of Concrete and Concrete Structures), May 22-25, 2016, Berkeley, CA, USA.
5.	2017	<b>Genikomsou A.S.</b> , Polak M.A. (2017). "Finite Element Analysis of slab-column connections subjected to cyclic lateral loadings", 16th World Conference on Earthquake Engineering, January 9-13, 2017, Santiago, Chile.
6.	2017	<b>Genikomsou A.S.</b> , Polak M.A. (2017). "Finite element simulation of RC slabs with different amount and placement of shear bolts", Procedia Engineering, 193:313-320, 9th International Conference, AMCM 2017 (5-7 June 2017), Gliwice, Poland.
7.	2017	Balomenos G.P., <b>Genikomsou A.S.</b> , Polak M.A., Pandey M.D. (2017). "Probabilistic finite element analysis of reinforced concrete slab-column connections using the multiplicative dimensional reduction method", 12th International Conference on Structural Safety & Reliability (ICOSSAR 2017), August 6-10, 2017, Vienna, Austria.
8.	2017	Balomenos G.P., <b>Genikomsou A.S.</b> , Polak M.A. (2017). "Opening effect on punching shear strength of RC slabs", 39th IABSE Symposium "Engineering the Future", September 21-23, 2017, Vancouver, Canada.
9.	2017	<b>Genikomsou A.S.</b> , Polak M.A. (2017). "Finite element investigation of the compressive membrane action effect on concrete slabs", 39th IABSE Symposium "Engineering the Future", September 21-23, 2017, Vancouver, Canada.
10.	2018	<b>Genikomsou A.S.</b> , Balomenos G.P., Polak M.A. (2018). "Shear testing of different type and size of GFRP reinforcing bars" 9th International Conference on Fibre-Reinforced Polymer Composites in Civil Engineering CICE 2018", July 17-19, 2018, Paris, France.
11.	2019	Haidar A., <b>Genikomsou A.S.</b> (2019). "Membrane action in reinforced concrete slabs" CCEE 2019, 12th Canadian Conference on Earthquake Engineering, June 17-20, 2019, Quebec City, Canada.
12.	2019	Carter J., <b>Genikomsou A.S.</b> (2019). "Finite element modeling concrete beams reinforced with basalt FRP bars" IABSE Congress 2019, September 2-3, 2019, New York City, USA.
13.	2020	Menna D., <b>Genikomsou A.S.</b> and Green M. (2020). "Flexural performance of double hooked steel fiber-reinforced concrete beams under cyclic loading", XI International Conference on Structural Dynamics (EURODYN 2020), November 23-25, Athens, Greece.
14.	2020	Menna D., <b>Genikomsou A.S.</b> (2020). "Punching Shear Response of RC Slab-Column Connections Strengthened with UHPFRC - Finite Element Investigation", X international Symposium on Fibre Reinforced Concrete, BEFIB 2020, September 21-23, Valencia, Spain.
15.	2021	Jackson R., Moore I, <b>Genikomsou A.S.</b> (2021). "The role of cementitious liners on the structural preservation of overburdened buried reinforced concrete pipes", CSCE 2021 Annual Conference, May 26-29, Niagara Falls, Canada.

16.	2021	Ralli Z., <b>Genikomsou A.S.</b> , Pantazopoulou S. (2021). "Comparative evaluation of nonlinear FEA inverse analysis of tensile properties of UHPFRC", fib Symposium 2021, June 14-16, Lisbon, Portugal.
17.	2021	Boules P., <b>Genikomsou A.S.</b> , Jawdhari A. and Fam A. (2021). "Numerical Investigation of a New Floor System with GFRP Stay-in-Place Forms and Embedded I-Beams", 10th International Conference on Fibre-Reinforced Polymer Composites in Civil Engineering CICE 2020/2021", December 8-10, Instabul, Turkey.
18.	2022	Panahi H., <b>Genikomsou A.S.</b> (2022). "Numerical Investigation of Slabs with Various Reinforcement Ratios", IABSE Symposium Prague 2022, May 25-27, 2022, Prague, Czech Republic.
19.	2022	Jeanneret C., Gales J., <b>Genikomsou A.S.</b> , Kotsovinos P. (2022). "Steel beam-to-column connection fire design", CSCE 2022 Annual Conference, May 25-28, Whistler, British Columbia, Canada.
20.	2022	Menna D., <b>Genikomsou A.S.</b> , Green M. (2022). "Monotonic and cyclic pull-out performance of hooked-end super elastic shape memory alloy fibres and steel fibers embedded into concrete", CSCE 2022 Annual Conference, May 25-28, Whistler, British Columbia, Canada.
21.	2023	Panahi H., <b>Genikomsou A.S.</b> (2023). "ML-based Punching Strength Estimations of Flat Slabs without Transverse Reinforcement under Lateral Loading", COMPDYN 2023, 9th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, June 12-14, 2023, Athens, Greece.
22.	2024	Saed G., Balomenos G.P., <b>Genikomsou A.S.</b> & Tait M.J. (2024). "Risk Assessment of Low-Rise Steel Buildings Exposed to Post-Earthquake Fire" 18th World Conference on Earthquake Engineering, June 30-July 5, 2024, Milan, Italy.
23.	2024	<b>Genikomsou A.S.</b> , Pantazopoulou S. (2024). "Seismic Shear transfer in slab to wall connections" 18th World Conference on Earthquake Engineering, June 30-July 5, 2024, Milan, Italy.

#### B. National

1.	2018	<b>Genikomsou A.S.</b> (2018). "Finite element analysis of reinforced concrete slab-column connections", 18th Greek Concrete Congress, 29-31 April, 2018, Athens, Greece.
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#### G. Other Publications/Databases

1.	2018	Carlos E. Ospina, Rupert Walkner, Widiyanto Widiyanto, Gerd Birkle, <b>Aikaterini Genikomsou</b> , Jonathan Monical (2018), "ACI 445 fib Punching Shear Database," <a href="https://datacenterhub.org/resources/14730">https://datacenterhub.org/resources/14730</a> .
2.	2022	D. Vargas, E. Lantsoght, and <b>A. Genikomsou</b> , "Spreadsheet validation for Flat slabs in eccentric punching shear experimental database and analysis." Zenodo, 2022. doi: <a href="https://doi.org/10.5281/zenodo.6532745">https://doi.org/10.5281/zenodo.6532745</a> .
3.	2022	D. Vargas, E. Lantsoght, and <b>A. Genikomsou</b> , "Spreadsheet for Flat slabs in eccentric punching shear: experimental database and analysis." Zenodo, Quito, 2022. doi: <a href="https://doi.org/10.5281/zenodo.6532705">https://doi.org/10.5281/zenodo.6532705</a> .

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4. 2022 Panahi H, **Genikomsou AS**. Database of Interior Flat Slab Specimens Imposed by Lateral Loading. Open Science Framework  
[https://osf.io/2et49/?view\\_only=82cf8099d96243deb96f3a83c5090f0b](https://osf.io/2et49/?view_only=82cf8099d96243deb96f3a83c5090f0b), DOI 10.17605/OSF.IO/2ET49.

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### Conference Presentations

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1. 2014 **Genikomsou A.S.**, Balomenos G.P., Polak M.A. "Finite Element Analysis of flat slabs retrofitted with shear bolts", presentation in the Research in Progress Session, organized by Committee 123, ACI Fall 2014 Convention (26-30, October), Washington, DC, USA

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2. 2015 Balomenos G.P., **Genikomsou A.S.**, Polak M.A., Pandey M.D. "Probabilistic finite element and sensitivity analysis of interior reinforced concrete flat slabs", presentation in the Open Topic Session, organized by Committee 123, ACI Fall 2015 Convention (07-11, November), Denver, CO, USA.

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3. 2016 **Genikomsou A.S.**, Polak M.A. "3D Finite Element Analysis of Concrete Flat Slabs Retrofitted with Steel Shear Bolts", invited presentation in the Session "Two-Way Slab Systems: Recent Developments and Showcases on Design, Analysis, Construction, and Evaluation Methods" by ACI-ASCE Committee 421, ACI Spring 2016 Convention (17-21 April), Milwaukee, WI, USA.

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4. 2016 Balomenos G.P., **Genikomsou A.S.**, Pandey M.D., Polak M.A. "Probabilistic Analysis of Interior Reinforced Concrete Flat Slabs", invited presentation in the Session "Two-Way Slab Systems: Recent Developments and Showcases on Design, Analysis, Construction, and Evaluation Methods" by ACI-ASCE Committee 421, ACI Spring 2016 Convention (17-21 April), Milwaukee, WI, USA.

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5. 2016 **Genikomsou A.S.**, Polak M.A. "3D Finite Element Analysis of Punching Shear of RC Flat Slabs Retrofitted with Steel Shear Bolts", invited presentation in Joint ACI-fib International Symposium on Punching Shear of Structural Concrete Slabs - Honoring Neil Hawkins, ACI Fall 2016 Convention (23-27 October), Philadelphia, PA, USA.

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6. 2018 **Genikomsou A.S.**, Milligan G., Polak M.A. "Modeling parameters in Punching Shear Finite Element Analysis of Concrete Slabs", invited presentation in the session Shear in Structural Concrete honoring Michael Collins, ACI Spring Convention (25-29 March, 2018), Salt Lake, UT, USA.

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7. 2018 **Genikomsou A.S.** "Finite element analysis of reinforced concrete slab-column and beam-column-slab connections", presentation in Mini-symposium: MS11: Symposium on Progressive Damage and Failure in Structures and Materials: Testing and Simulation, EMI 2018 (May 29-June 1), Boston, MA, USA.

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8. 2018 **Genikomsou A.S.**, Polak M.A. "A damage-plasticity model for finite element analysis of slab-column connections", invited presentation in the Session "Numerical modeling and analysis of two-way slabs" by ACI-ASCE Committees 421 and 447, ACI Fall 2018 Convention (14-18 October), Las Vegas, NV, USA.

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9.	2020	Menna D., <b>Genikomsou A.S.</b> , Green M. (2020). “Flexural performance of fibre reinforced concrete under cyclic loading”, invited presentation, Quebec and Eastern Ontario ACI Chapter, University of Ottawa, Ottawa, ON, Canada, February 21, 2020.
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### Invited Seminars

1.	2016	York University, Department of Civil Engineering, “3-D Finite Element Analysis of Punching Shear of RC Slabs using ABAQUS”, Toronto, Ontario, Canada, 31 March, 2016.
2.	2016	Queen’s University, Department of Civil Engineering, “3-D Finite Element Analysis of Punching Shear of RC Slabs”, Kingston, Ontario, Canada, May 18, 2016.
3.	2017	Texas A&M University, Zachry Department of Civil Engineering, “Finite Element Analysis of RC slabs”, College Station, Texas, USA, 15 December, 2017.
4.	2018	Buffalo University, The State University of New York, Department of Civil and Environmental Engineering, “Finite Element Analysis of RC structures using damage-plasticity models”, Buffalo, New York, USA, 2 November, 2018.
5.	2019	McGill University, Department of Civil Engineering, "Numerical modeling and testing towards resilient structures", Montreal, Quebec, Canada, 11 March, 2019.
6.	2019	University of Cyprus, Department of Civil and Environmental Engineering, "Numerical modeling and testing of reinforced structures", Nicosia, Cyprus, 24 June, 2019.
7.	2021	University of Ottawa, Department of Civil and Environmental Engineering, "Numerical modeling and testing of reinforced structures", Ottawa, Ontario, Canada, 18 January, 2021.
8.	2021	University of Waterloo, Department of Civil and Environmental Engineering, "Numerical modeling and testing of UHPFRC structures", Waterloo, Ontario, Canada, 28 July, 2021.
9.	2022	York University, Department of Civil Engineering, “Numerical modeling and testing of UHPFRC structures”, Toronto, Ontario, Canada, 19 May, 2022.
10.	2023	Hellenic Open University, School of Science and Technology, Summer School “Natural, biological and man-made catastrophies – technical projects”, 8-23 July, 2023. «Fragility analysis of structures subjected to tornadoes».

### Round Table Speaker

1.	2021	Canadian Society of Civil Engineering, CSCE 2021 Conference, (26-29 May 2021), Virtual conference, Canada. Engineering Mechanics and Materials (EMM)’s division panel session “Transitioning from Graduate Studies to Securing Faculty Positions”.
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2. 2022 CSCE National Student Conference Structural Session, (26 February 2022), Virtual conference, Canada. "Structural Research".
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### Participation in the Writing of International Guidelines

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- 2021 ACI Technical Report, ACI PRC-421.2-21, Seismic Design of Punching Shear Reinforcement in Flat Plates-Guide, Reported by Joint ACI-ASCE Committee 421
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- 2023 ACI Special Publication, SP-357: Punching Shear of Concrete Slabs: Insights from New Materials, Tests, and Analysis Methods, Co-editors Dr. **Katerina Genikomsou**, Dr. Trevor Hrynyk, and Dr. Eva Lantsoght
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### Acknowledgement of Scientific Expertise

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#### A. Awards - Distinctions - Scholarships

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- 2011 Hellenic State Scholarships Foundation  
Scholarship for PhD studies abroad. Research Subject: Structures technology: Seismic mechanics. *Dr. Genikomsou did not use the fellowship due to a fellowship received from the University of Waterloo.*
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- 2012-2015 Graduate studies Fellowship (\$122,456), University of Waterloo, Ontario, Canada
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- 2014 Excellence in PhD Research Award, Department of Civil and Environmental Engineering, University of Waterloo, Ontario, Canada (\$1,500)
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- 06/2015 Excellence in PhD Research Award, Department of Civil and Environmental Engineering, University of Waterloo, Ontario, Canada (\$1,500)
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- 10/2015 Excellence in PhD Research Award, Department of Civil and Environmental Engineering, University of Waterloo, Ontario, Canada (\$1,500)
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- 2015 Best Teaching Assistant Award, Department of Civil and Environmental Engineering, University of Waterloo, Ontario, Canada (\$1,500)
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- 2019 American Society of Civil Engineers (ASCE)  
ASCE ExCEED Fellow (\$1,500)
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2024

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#### B. Citations / h-index

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1218, h-index = 13

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#### C. Reviewer in Scientific Journals

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Reviewer for the following refereed journals

- ASCE, Journal of Structural Engineering
  - Bulletin of Earthquake Engineering, Springer
  - Engineering Structures, Elsevier
  - Mechanics of Advanced Materials and Structures
  - International Journal of Concrete Structures and Materials, Springer
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- Computers and Concrete, An International Journal, Techno-Press
- Structural Engineering and Mechanics, An International Journal, Techno-Press
- Mechanics Based Design of Structures and Machines, An International Journal
- Frontiers of Structural and Civil Engineering, Springer
- Frontiers in Built Environment
- Canadian Journal of Civil Engineering
- Structural Concrete, Wiley
- Soil Dynamics and Earthquake Engineering, Elsevier
- Journal of Structural Fire Engineering, Emerald.
- Buildings, MDPI
- Applied Sciences, MDPI
- Building Engineering, Elsevier

Reviewer for the following conferences

- 39th IABSE Symposium “Engineering the Future”, September 21-23, 2017, Vancouver, Canada.
- 15th International Symposium on Human-Induced Vibrations and Seismic Influences on Structures, 29-30 November, 2018, Krakow, Poland.
- CSCE Annual Conference “Building Tomorrow’s Society”, June 13-16, 2018, Fredericton, Canada.
- CSCE Annual Conference “Inspired by nature”, May 26-29, 2021, Virtual Conference, Canada.

#### D. Member in Professional Associations

2008-present Technical Chamber of Greece

2012-present ACI- American Concrete Institute

2012-present ASCE- American Society of Civil Engineers

2019-present ASCE EMI Computational Mechanics Committee

2020-present Canadian Association for Earthquake Engineering

2020-present Professional Engineers of Ontario, Canada <https://www.peo.on.ca/>

2021-present Hellenic Society of Civil Engineers

#### Other Activities

##### A. Coordinator of conference sessions

2018 “Numerical modeling and analysis of two-way slabs”. ACI-ASCE Committees 421 and 447, ACI Fall 2018 Convention (14-18 October), Las Vegas, NV, USA.

2021 “Materials and Structures I and II”, Canadian Society of Civil Engineering CSCE 2021 Conference, (26-29 May 2021), Virtual conference, Canada.

2023	“Numerical simulation methods for dynamic problems- COMPDYN TS 14-I”, 9th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering COMPDYN 2023, (12-14 June 2023), Athens, Greece.
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#### **B. Member of Scientific Committee of Conferences**

2017	39th IABSE Symposium “Engineering the Future”, September 21-23, 2017, Vancouver, Canada.
2018	15th International Symposium on Human-Induced Vibrations and Seismic Influences on Structures, 29-30 November, 2018, Krakow, Poland.
2018	CSCE Annual Conference “Building Tomorrow’s Society”, June 13-16, 2018, Fredericton, Canada.
2021	CSCE Annual Conference “Inspired by nature”, May 26-29, 2021, Virtual Conference, Canada.
2024	16th International Symposium on Human-Induced Vibrations and Seismic Influences on Structures, 15-18 May, 2024, Krakow, Poland.

#### **C. Participation in Educational Seminars /Training Programs**

2013	Fundamentals of University Teaching (FUT) (04/2013) University of Waterloo, Ontario, Canada
2014	Certificate in University Teaching (CUT) (12/2014) University of Waterloo, Ontario, Canada
2017	Teaching Certificate (Centre for Teaching and Learning, Queen’s University, Ontario, Canada)
2017	Canadian Engineering Education Association (CEEA) Workshop on Teaching for effective learning in engineering, June 3, 2017, University of Toronto, Toronto, Canada.
2019	American Society of Civil Engineers (ASCE) Teaching workshop ExCEEEd, June 2-7, 2019, University of Lincoln, Nebraska, USA.
2020-2021	Pedagogical and Teaching Certificate Annual Program (ΕΠΠΑΙΚ), ASPETE Thessaloniki, Greece.
2024	Certificate in open and distance learning education Hellenic Open University, Patras, Greece.

**Thessaloniki, April 2024**