

Curriculum Vitae

MICHALIS FRAGIADAKIS, PhD



Personal Information

Name: Michail
Surname: Fragiadakis
Preferred name: **Michalis Fragiadakis**
Birth date: 24 December 1976
Current position: Associate Professor
Laboratory for Earthquake Engineering
School of Civil Engineering
National Technical University of Athens (NTUA)
Researcher ids: ORCID: 0000-0002-0698-822X, Scopus: 6505461799
Publication metrics: h-factor: 20/24 ([Scopus/Google Scholar](#)) (accessed 20 June 2020)
citations: 1166/2000 ([Scopus/Google Scholar](#)) (accessed 20 June 2020)

Contact Information

office Address: 9 Iroon Polytechniou Str., Zografou Campus, Athens 15780, Greece
home Address (GR): 23 Kraterou Str., Zografou, Athens 15771, Greece
home Address (FR): 4 allée du Niger, Bât. A, Apartment 1010, Toulouse 31000, France
phone: +30 210 772 1185 (office), +30 6977 298767 (mobile)
+33 7 69705177 (mobile)
email: mfrag@mail.ntua.gr
homepage: <http://users.ntua.gr/mfrag>

Research Interests

- Structural reliability, risk and hazard assessment lifelines and infrastructure
- Finite element methods in structural analysis and design

- Earthquake Engineering
- Structural design and assessment to the Eurocodes
- Smart materials
- Structural Optimization and Machine Learning methods in structural engineering.

Education

- 2002 – 2006 PhD in Civil Engineering, School of Civil Engineering, National Technical University of Athens
- 2001 – 2002 MSc in Structural Analysis and Design, School of Civil Engineering, National Technical University of Athens
- 2000 – 2001 MSc in Earthquake Engineering and Structural Dynamics, Department of Civil and Environmental Engineering, Imperial College of Science Technology and Medicine, United Kingdom
- 1995 – 2000 Degree in Civil Engineering, School of Civil Engineering, National Technical University of Athens
- 1995 High-school education.

Academic Appointments

- 10/05/2016 – today **National Technical University of Athens**
School of Civil Engineering, Assistant Professor
- 20/4/2017 – 30/9/2017 **Institute Mécanique des Fluides Toulouse (IMFT)**
Toulouse, France, Visiting Professor
- 27/12/2013 – 10/5/2016 **National Technical University of Athens**
School of Civil Engineering, Lecturer
- 1/9/2012 – today **School of Corps of Engineers of the Hellenic Army (SCEHA)**
Adjunct Lecturer
- 3/5/2010 – 31/12/2013 **University of Cyprus**
Department of Civil & Environmental Engineering, Post-doctoral researcher
- 1/3/2007 – 31/8/2011 **University of Thessaly**
Department of Civil Engineering, Adjunct Lecturer
- 1/5/2007 – 31/1/2009 **University of Pavia**
Department of Structural Mechanics, Post-doctoral researcher

Foreign languages

- English (C2 level, fluent) (Cambridge Proficiency in English, May 1997)
- French (B2 level), Alliance Française Toulouse (4 months, 2017), Institute Française d'Athènes (since Sept 2017)
- German (B1 level) (Deutsch Fremdsprache für Ausländer, June 1992).

Teaching

Current teaching duties:

School of Civil Engineering, National Technical University of Athens:

Nonlinear finite element modeling of frame structures (graduate course, since 2007)
Signal processing and seismic engineering applications (graduate course, since 2018)
Earthquake Engineering 1
Earthquake Engineering 2
Reliability analysis

School of Corps of Engineers of the Hellenic Army (SCEHA):

Analysis and Design of Bridges I (since 2012)
Analysis and Design of Bridges II (since 2012)

Past teaching duties:

School of Civil Engineering, National Technical University of Athens:

Engineering solution methods using computers (3 Semesters, 2015-2017)
Structural Analysis V: Elasto-plastic analysis of structures (Teaching Assistant)

School of Corps of Engineers of the Hellenic Army (SCEHA):

Reinforced Concrete II (1 Semester, 2012-2013)

Department of Civil Engineering, University of Thessaly:

Analysis and design of surface structures (5 Semesters, 2006-2011)
Structural Analysis II (2 Semesters, 2008-2009 & 2010-2011)
Structural Analysis I (1 Semester, 2009-2010)
Structural Dynamics (1 Semester, 2007-2008)

Department of Structural Engineering, TEI of Heraklion, Crete:

Structural Calculations (2 Semesters, 2005-2006)
Structural Analysis II (2 Semesters, 2005-2006)

Academic Advising (Principal Advisor or Co-Advisor)

Ph.D. Level advised (or co-advised) 7 PhD students:

- P6. Achmet Z.: The framework for civil protection in Greece and Europe
- P5. Giouva I.: The framework for civil protection in Greece and Europe
- P4. Diamantopoulos S.: Dynamic response of non-structural components and building contents to seismic loading
- P3. Dimakopoulou V: Behaviour of RC frame members under near-fault strong ground motions (in collaboration with C. Spyrakos)
- P2. Bakalis K. (Feb 2018): Vulnerability assessment of steel structures of the chemical industry (in collaboration with D. Vamvatsikos)
- P1. Zacharenaki A (Oct 2014): Optimum design of steel structures under seismic loading (in collaboration with M. Papadrakakis)
- P0. Papachristidis A (Sept 2009): Numerical simulation of structures under static and dynamic loading with high performance finite elements (in collaboration with M. Papadrakakis).

Member of the **three-member advisory board** of 15 PhD students

Member of the **examination committee** of 9 PhD students

M.Sc. Level advised (or co-advised) 28 postgraduate students:

Stylianakis S. (February 2020), Basel Abujabal (July 2019), Basel A (July 2019), Achmet Z. (February 2019), Panagi S (Feb 2019), Torou ED (Feb 2019), Lada M (Feb 2019), Kolokytha M. (July 2018), Palkanoglou M. (Feb 2018), Chamosfakidis G (Feb 2018), Karachaliou D. (Feb 2018), Mpampatzeliou D. (Feb 2018), Ghanem A (Feb 2018), Saber M. (Feb 2018), Mantelos, M (January 2017), Diamantopoulos S (January 2017), Balokas G (July 2016), Tolis A (Oct 2011), Kakkari D (Oct 2011), Papageorgopoulou A (Oct 2010), Mitseas I (Oct 2009), Tsitsias V (July 2008), Zacharenaki A (Oct 2007), Vizirgianakis V & P (Oct 2006), Rizou V (March 2005), Tzineurakis S (July 2004), Kapagiannis M (Hellenic Open University, Sept 2013).

Undergraduate Level 34 undergraduate student in their Diploma Thesis:

Lekkas A (Feb 2020), Zanni A (Feb 2020), Vlachos N (Sept 2019), Kourogiorgas E (Sept 2019), Georgakis P (Feb 2019), Perloretzos M (Sept 2018), Venizelos A (Feb 2019), Repousis N. (Feb 2019), Giannakou A (Sept 2018), Markesinis A (Sept 2018), Aggelou I (July 2018), Koutoulas K (July 2018), Astitha A (Feb 2018), Kremyda E (Feb 2018), Manouselis (Feb 2017), Michail E, (Sept 2018), Soulis S (Sept 2017), Staurakantonakis Y (Sept 2017), Feliou A (Feb 2017), Kolokytha M

(July 2016), Charalampous A-T (Sept 2016), Theofilatos G-E (Sept 2016), Fountas (Sept 2014), Pternea M (Feb 2014), Spachis A (Feb 2014), Strataki A (Feb 2014), Boltsi A (Univ. of Thessaly Sept 2010), Mousafeiropoulos G (Univ. of Thessaly, Sept 2011), Tolis A (Univ. of Thessaly, Oct 2009), Mitseas I (Univ. of Thessaly, Oct 2008), Ioannidi D (July 2006), Giovanis D (Oct 2005), Papaionannou I (March 2005), Rizou V (Oct 2003).

International exchange programs advised (or co-advised) 3 students:

Emanuele Mastrangelo (*University of Basilicata, July 2017*), Maitenaz Sebastien (ENPC France, July 2015: *Seismic reliability assessment of articulated systems subjected to near-fault motions*), Siraj-Dine Sami (ENPC France, July 2014: *Seismic reliability assessment of articulated systems subjected to near-fault motions (in collaboration with I. Psycharis)*).

Administrative Experience (National Technical University of Athens)

- School of Civil Engineering: member of the Committee for Equipment and Consumables (3 members)
- School of Civil Engineering: member of the Committee for Computers and Networks (5 members)
- Structural Engineering Division: member of the General Assembly (20 members)
- School of Civil Engineering: member of the General Assembly (60 members)
- University: deputy member of the Senate Committee for Fundamental Research (20 members)

Honors, scholarships and distinctions

- Delegate of Greece in the Young Investigator Committee (YIC) of ECCOMAS (European Community on Computational Methods in Applied Sciences), 2011-2014.
- Young researcher fellowship award for exemplary research in Computational Mechanics, Second M.I.T. Conference on Computational Fluid and Solid Mechanics, Cambridge, MA, USA, June 17, 2003.
- Scholarship of the Secretariat of the Research Committee of the National Technical University of Athens for PhD studies.
- University admittance exams (1994): Chemistry 157/160, Physics 152/160, Mathematics 156/160 (upper 5% nationally).

Participation in Committees of Codes/Guidelines

- European Association for Earthquake Engineering, Work Group 13: “Seismic assessment, design and resilience of industrial facilities.”
- ATC-76 (Task Order 6): Applicability of Nonlinear Multiple-Degree-of-Freedom Modelling for Design, U.S. Department of Commerce, National Institute of Standards and Technology (NIST), 2009-2010.

Professional societies membership

- Delegate of Greece to the International Association for Earthquake Engineering (IAEE) (since November 2019)
- Treasurer of the Hellenic Society for Earthquake Engineering (HSEE) (July 2016 – today)
- Earthquake Engineering Research Institute (EERI)
- American Society of Civil Engineers (ASCE)
- Greek Association of Computational Mechanics (GRACM)
- Hellenic Society for Theoretical & Applied Mechanics (HSTAM)
- Technical Chamber of Greece (TEE)

Research Projects

Principal Investigator (PI) and/or Team Leader:

- SAFEMUSEUM “A new isolation system for the seismic protection of Museum exhibits”, GSRT National Research Program 2020. (role: PI, project budget: 420.000€, team budget 300,000€)
- SCIENCE SpaCeborne SAR Interferometry as a Noninvasive tool to assess the vulnerability over Cultural hEritage sites, Greece-China: GSRT National Research Program, 2003-2005) (role: Team Leader, co-PI– project budget: 340.000€, team budget 75,000)
- SERA/SPIF Seismology and Earthquake Engineering Research Infrastructure Alliance for Europe”, INFRAIA-01-2016-2017 Research Infrastructure for Earthquake Hazard. Transnational access for the proposal: ”A risk-informed decision making analysis for nuclear (NPP) and special risk (SIP) facilities in seismic areas”, hosted in EUCENTER, Pavia, Italy. (role: Team member, estimated project budget: 60.000€)
- ARCHYTAS “Archetypal telemetry and decision support system for the Protection of monumental structures”, GSRT-ESPA. (role: Team Leader, project budget: 743.000€, team budget: 30.000€)
- SERA/SEREME Seismology and Earthquake Engineering Research Infrastructure Alliance for Europe”, INFRAIA-01-2016-2017 Research Infrastructure for Earthquake Hazard. Transnational access for the proposal: ”SE.RE.M.E.: SEismic REsilience of Museum contEnts”, hosted in CEA Paris (role: Team Leader – PI, estimated project budget: 70.000€)
- Thalis “Fragility assessment and seismic risk assessment for the protection of industrial structures”, GSRT-ESPA, 2007-2013. (project budget: 540.000€, role: co-PI, fee received: 30.000€)
- ACE Hellas “Optimum Seismic Design of Reinforced Concrete buildings with elastic and inelastic response”, Software development for American Computers for Engineers (ACE Hellas) Ltd, 2006-2008 (project budget: 41.000€, role: co-PI, fee received: 1.462€)

Principal Researcher:

ABAKAS: “Sustainable design of Structures”, GSRT-ESPA, 2013.

NIREAS- Principal Researcher: “Seismic assessment of Kouris earth-dam”. NEA YPODOMI

IWRC: / STRATI / 0308 /09 , Co-funded by the European Regional Development Fund and the Republic of Cyprus through the Cyprus Research Promotion Foundation, 2013-2015. (project budget: 2.000.000€, fee received: 27.000€)

Cariplo Foundation: “Innovative Materials for Structural Rehabilitation in a zone of high seismic risk: Development of models for the interpretation of the behavior of structures reinforced with FRP”. In collaboration with the University of Pavia, 2007-2009. (project budget: 300.000€, fee received: 58.000€)

PENED 2001: “Detailed modeling and analysis with finite elements of RC buildings under static and dynamic loading”, GSRT National Research Program, 2003-2005. (project budget: 88.000€, fee received: 30.000€)

Researcher with contract:

MASTER “Mastering the computational challenges in numerical modelling and optimum design of CNT reinforced composites”, ERC-2011-ADG_20110209, 2014. (project budget: 2.500.000€, fee received: 30.000€)

Thalis: “Solving complex analysis problems for the towers of new generation wind turbines”, GSRT-ESPA, April 2012. (project budget: 540.000€, fee received: 1.000€)

DARE: “Soil-foundation structure systems beyond conventional seismic “failure” thresholds: application to new or existing structures and monuments”, 1/12/2008-31/10/2013. (project budget: 2.400.000€, fee received: 2.000€)

ADERS “Analysis and Design of Earthquake Resistant Structures”, FP7-People-2010-IRSES, 2011-2012. (project budget: 1.400.000€, fee received: 8.400€)

Reviewer of research projects

EPANET “Research and Innovation”. Greek Ministry of Education and Religious Affairs, Sept. 2019

GSRT “Set up and support innovative spin-off and spin-out companies”. GSRT-67KAIN2010Δ, Sept. 2013

IKY National Scholarship Foundation for PhD studies (since 2018).

GSRT Reviewer for 5 national research projects since 2016.

Editorial Board

- Engineering Structures (Elsevier)
- GeoHazards (MDPI)
- Journal of Structural Integrity and Maintenance (Taylor and Francis)
- International Journal of Earthquake and Impact Engineering (Interscience publishers)
- Frontiers in Built Environment: Bridge Engineering
- Frontiers in Built Environment: Computational Methods in Structural Engineering
- International Journal of Earthquake Engineering and Hazard Mitigation (IREHM)

Referee and Review Activities

Peer reviewed papers of more than **180** papers for **49** International Journals. The Journal titles are as follows (the publisher is shown in parenthesis):

Elsevier: Computer Methods in Applied Mechanics and Engineering, Computer and Structures, Structural Safety, Journal of Thin Wall Structures, Engineering Structures, Probabilistic Engineering Mechanics, Journal of Fluids and Structures, International Journal of Mechanical Sciences, Advances in Engineering software, Advances in Structural Engineering, Journal of Cultural Heritage, Soft Computing

Wiley: Earthquake Engineering and Structural Dynamics (EESD), International Journal of Sustainable Engineering, Asian Journal of Control

Springer: Bulletin of Earthquake Engineering, Computational Mechanics, Structural & Multidisciplinary Optimization, Earthquake Engineering and Engineering Vibration, Materials and Structures Water Resources Management, Soft Computing, Natural Hazards

Taylor & Francis: Journal of Earthquake Engineering, Engineering Optimization, Structure and Infrastructure Engineering , Ships and Offshore Structures

ASCE: Journal of Structural Engineering, Engineering Mechanics, Journal of Pipeline Systems, Journal of Computing in Civil Engineering

EERI: Earthquake Spectra

ICE: Structures, Structures & Buildings

ASME: Journal of Pressure Vessel Technology

TechnoPress: Earthquakes and Structures, Steel and Composite Structures

Hindawi: Modelling and Simulation in Engineering

Other publishers: Earthquake Spectra (EERI), International Journal of Computational Methods (World Scientific Publishing), Scientia Iranica, Journal of Civil Engineering and Construction

Practice, The Open Construction and Building Technology Journal, International Journal of Physical Sciences, Korean Society of Civil Engineering, Journal of Civil Engineering, British Journal of Applied Science and Technology (Sciencedomain), Frontiers in Built Environment (Frontiers), NED University Journal of Research, Journal of Civil Engineering IABSE Structural Engineering International.

Invited lectures

- | | |
|----------------------|--|
| 17 December 2019 | “Seismic reliability and resilience assessment of pipe networks”, Workshop: “Resilience of pipeline networks to seismic hazards”, <i>University of Bristol</i> , Bristol, UK. |
| 23 July 2019 | “Properties and applications of Shape Memory Alloys”, <i>CIRIMAT - Centre Inter-universitaire de Recherche et d’Ingénierie des Matériaux</i> , Toulouse, France. |
| 29 May 2018 | “Seismic risk and resilience assessment of critical infrastructure”, <i>Ecole National des Pontes et Chaussées</i> , Paris, France. |
| 18-25 September 2017 | 1-week seminar doctoral course on “Computational methods for the seismic assessment of structures”, Roma Tre University, Rome, Italy. |
| 13-17 March 2017 | “Performance-based risk assessment of critical structures and systems”, <i>Complex Decision Making under Emergency Conditions</i> , Organized by <i>Politecnico di Milano, Politecnico di Torino</i> , Loano, Italy. |
| 1 June 2016 | “Nonlinear stochastic analysis of structures with spatially variable system properties”, <i>DeGrieLab Workshop: Structural health monitoring for resilient Infrastructure</i> , Chalkidi, Greece. |
| 22 September 2015 | “Seismic reliability assessment of structures, monuments and infrastructure”, <i>University College London</i> , London, UK. |
| 13 May 2015 | “Inelastic analysis of frame structures”, <i>DeGrieLab Summer School, Aristotle University of Thessaloniki</i> , Greece. |
| 13 March 2013 | “Reliability Assessment of urban water distribution networks under seismic loads”, <i>University of Cyprus</i> , Nicosia, Cyprus. |
| 20 November 2011 | “Static pushover versus nonlinear dynamic analysis: qualitative-quantitative comparison and seismic risk assessment”, <i>Universidad Autonoma Metropolitana</i> , Azcapotzalco, Mexico City, Mexico. |
| 14 November 2008 | “Performance-based design and reliability assessment of seismically excited structures”, <i>University of Cyprus</i> , Nicosia, Cyprus. |

Lectures to practicing engineers

- 1 Dec. 2012 Colloquium for new KANEPE design code for the seismic upgrade and assessment of RC structures, Kos Island November 30th, 2012 - Kalymnos Island, Greece.
- July 2012 Lecture Series: “Application of the new KANEPE design code for the seismic upgrade and assessment of RC structures”, Engineering Intelligence, Athens, Greece.
- May 2009 Lecture Series: “Application of novel technologies for the analysis and design of earthquake-resistant structures”. Technical Chamber of Greece, Athens, Greece.
- 2008 Lecture Title: “Contemporary computational tools for the analysis and design of buildings”, National Center for Public Administration and Local Government, Thessaloniki, Greece.

Chairman of International Conferences

- COMPDYN 2021, “8th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering”, 21-23 June 2021, Athens, Greece.
- EURODDYN 2020, “11th International Conference on Structural Dynamics”, 23-25 November 2020, Athens, Greece.
- COMPDYN 2019, “7th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering”, 24-26 June 2019, Hersonissos Crete, Greece.
- COMPDYN 2017, “6th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering”, 15-17 May, Rhodes, Greece.
- COMPDYN 2011, “3rd International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering”, 26-28 May, Corfu, Greece.
- COMPDYN 2009, “2nd International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering”, 22-24 June 2009, Island of Rhodes, Greece.

Organising/Steering Committee of International Conferences

- “4th National Conference for Earthquake Engineering and Engineering Seismology”, 5-7 September, Athens, Greece.
- “16th European Conference on Earthquake Engineering”, 16ECEE, 18-21 June 2018, Thessaloniki, Greece.

- “European Congress on Computational Methods in Applied Sciences and Engineering”, EC-COMAS Congress 2016, 5-10 June, Crete Island, Greece.
- “5th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering”, COMPDYN 2015, 25-27 May, Crete Island, Greece.
- “4th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering”, COMPDYN 2013, 12-14 June, Kos Island, Greece.
- “7th GRACM International Congress on Computational Mechanics”, Greek Association of Computational Mechanics, 30 June - 2 July 2011, Athens, Greece.

Editorial or Scientific Board of International Conferences

- “15th International Conference on Vibration Problems (ICOVP 2021)”, Doha, Qatar, 14-17 November 2021.
- “Evolutionary and Deterministic Methods for Design, Optimization and Control (EUROGEN 2021)”, Athens, Greece, 17-19 May 2021.
- “The Sixteenth International Conference on Civil, Structural & Environmental Engineering Computing”, Riva del Garda, near Lake Garda, Italy, 16-19 September 2019.
- “14th International Conference on Vibration Problems (ICOVP 2019)”, Crete, Greece, 1-4 September 2019.
- “ECT2018 The Tenth International Conference on Engineering Computational Technology”, Sitges, Barcelona, Spain, 4-6 September 2018.
- “16th European Conference on Earthquake Engineering”, 16ECEE, 18-21 June 2018, Thessaloniki, Greece.
- “6th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering”, COMPDYN 2017, 15-17 June, Rhodes, Greece.
- “The Fourth International Conference on Soft Computing Technology in Civil, Structural and Environmental Engineering”, CIVIL-SOFT-COMP 2015, Prague, Czech Republic, 1-4 September 2015.
- “2nd ECCOMAS Young Investigators Conference (YIC)”, Bordeaux, France, 2-6 September 2013.
- “The Third International Conference on Soft Computing Technology in Civil, Structural and Environmental Engineering”, Cagliari, Sardinia, Italy, 3-6 September 2013.
- “The Second International Conference on Soft Computing Technology in Civil, Structural and Environmental Engineering”, Chania, Crete, 6-9 September 2011.

Conference Charing Sessions

- 3 sessions: “4th National Conference for Earthquake Engineering and Engineering Seismology”, 5-7 September, Athens, Greece.
- 3 sessions: “7th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering”, COMPDYN 2019, May 2019, Hersonissos Crete, Greece.
- 2 sessions: “16th European Conference on Earthquake Engineering”, 16ECEE, 18-21 June 2018, Thessaloniki, Greece.
- 1 session: “9th GRACM International Congress on Computational Mechanics”, Chania, 4-6 June 2018.
- 2 sessions: “6th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering”, COMPDYN 2017, 15-17 June, Rhodes, Greece.
- 2 sessions: “European Congress on Computational Methods in Applied Sciences and Engineering”, ECCOMAS Congress 2016, 5-10 June, Crete Island, Greece
- 2 sessions: “5th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering”, COMPDYN 2015, 25-27 May, Crete Island, Greece.
- 1 session: “3rd International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering”, COMPDYN 2011, 26-28 May, Corfu, Greece.
- 1 session: “2nd International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering”, COMPDYN 2009, 22-24 June 2009, Island of Rhodes, Greece.
- 1 session: “14th World Conference on Earthquake Engineering (14WCEE)”, October 12-17, 2008, Beijing, China.
- 1 session: “International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, COMPDYN-2007”, 13-15 June 2007, Rethymno, Greece.

Organiser of Special Sessions in International Conferences

- “Experimental Earthquake Engineering”, Mouzakis, H. **Fragiadakis, M.** in EURODDYN 2020: “11th International Conference on Structural Dynamics”, 23-25 November 2020, Athens, Greece.
- “Seismic Resilience of Museum Contents”, **Fragiadakis, M.**, DiSarno, L., in “7th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering”, COMPDYN 2019, 24-26 June, Crete, Greece.

- “Special Session: “Dynamics and Seismic Response of Rocking and Self-Centering Structures”, Dimitrakopoulos, E., Vassiliou, M., DeJong, M., **Fragiadakis, M.** in the “16th European Conference on Earthquake Engineering”, 16ECEE, 18-21 June 2018, Thessaloniki, Greece.
- “Dynamic and Seismic Response of Rocking and Self-Centering Structures”, Dimitrakopoulos, E., **Fragiadakis, M.**, Vassiliou, M. in the “6th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering”, COMPDYN 2017, 15-17 June, Rhodes Island, Greece.
- “Seismic resilience of critical infrastructure and infrastructure”, Vanzi, I, Sextos, A., **Fragiadakis, M.**, Karamanos, S. in the “6th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering”, COMPDYN 2017, 15-17 June, Rhodes Island, Greece.
- “Dynamics and Seismic Response of Rocking and Self-centering Structures”, DeJong, M., Dimitrakopoulos, E., **Fragiadakis, M.** in the “European Congress on Computational Methods in Applied Sciences and Engineering”, ECCOMAS Congress 2016, 5-10 June, Crete Island, Greece.
- “Stochastic dynamics tools for performance-based engineering”, co-organised by G. Stefanou and **M. Fragiadakis** in the “5th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering”, COMPDYN 2015, 25-27 May, Crete Island, Greece.
- “Optimization Algorithms in Earthquake Engineering”, co-organised by **M. Fragiadakis** in the Conference on Engineering and Applied Sciences Optimization (OPTI 2014), 4-6 June, Kos Island, Greece.
- “Seismic Analysis and Design of Industrial Facilities and Pipelines”, co-organised by S. Karamanos, P. Dakoulas, V. Papadopoulos and **M. Fragiadakis** in the “4th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering”, COMPDYN 2013, 12-14 June, Kos Island, Greece
- “Aseismic Design of Structures and Lifelines” organized by M. Papadrakakis and **M. Fragiadakis**, in the EURODDYN 2011, 8th International Conference on Structural Dynamics, Lueven, Belgium, July 4-6, 2011.
- “Seismic Performance Evaluation under Uncertainty” organized by D. Vamvatsikos and **M. Fragiadakis**, in the International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, COMPDYN-2011, Corfu, Greece, May 26-28, 2011.
- “Nonlinear stochastic dynamics of structures with uncertain mechanical and geometric properties” organized by George Stefanou, **Michalis Fragiadakis** and Manolis Papadrakakis

in the 10th International Conference on Structural Safety and Reliability, Osaka, Japan, September 13-17, 2009.

- “Seismic Structural Optimization” organized by Manolis Papadrakakis, Nikos Lagaros and **Michalis. Fragiadakis**, in the 14th World Conference on Earthquake Engineering (14WCEE), Beijing, China, October 14-17, 2008.
- “Innovative Approaches for Seismic Design using Nonlinear Analysis Methods” organized by **Michalis Fragiadakis**, Christopher M. Foley and Yiannis Tsompanakis, in the International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, COMPDYN-2007, Rethymno, Crete, Greece, June 13-16, 2007.

Journal Special Issues

- Computational Issues in Earthquake Engineering and Structural Dynamics (201X), *Iranian Journal of Science and Technology*, Civil Engineering Transactions.
- Computational Issues in Structural Engineering (201X), *Journal of Applied and Computational Mechanics*.

Lecture notes

- **M. Fragiadakis**, Lecture notes of the post-graduate course: “Nonlinear Finite Element Modeling of RC and Steel member”, School of Civil Engineering, National Technical University of Athens, October 2015. Course page: [course web page](#), [download the notes](#).

Publications

The research work consists of **4** books (**2** edited), **39** journal papers (International journal, peer-reviewed), **16** book chapters in edited books, **106** conference papers (International conferences, peer-reviewed) and **4** theses/dissertations.

Books

- B4. **Fragiadakis M.** “Nonlinear analysis of frame structures under seismic loading”, Springer International publishing (contract No 57747, July 2016), to be delivered.
- B3. S. Christodoulou, **Fragiadakis M.**, A. Agathokleous, S. Xanthos. “Urban Water Distribution Networks: Assessing Systems Vulnerabilities, Failures, and Risks”, Elsevier (2017). [web page](#)

- B2. “Computational Methods in Earthquake Engineering – Vol. 2”, edited by M. Papadrakakis, **Fragiadakis M.**, V. Plevris (Eds.), Springer-Verlag, Berlin (2013). (98000 downloads on 07/03/2020). [web page](#)
- B1. “Computational Methods in Earthquake Engineering”, edited by M. Papadrakakis, **M. Fragiadakis**, N.D. Lagaros (Eds.), Springer-Verlag, Berlin (2011) (47000 downloads on 07/03/2020). [web page](#)

Journal Papers

- J40. Simiriotis, N., **M. Fragiadakis, M.** Rouchon, J.F., Braza, M. 20XX “An efficient algorithm for the shape control of aeronautical configurations using shape memory alloy actuators”, *Computers and Structures*, under review
- J39. Balokas, G. **Fragiadakis, M.**, (2020). “Stochastic assessment of frame structures under seismic loading with flexibility-based fiber elements”, *Structure and Infrastructure Engineering*, doi: 10.1080/15732479.2020.1757728. [download](#)
- J38. **Fragiadakis, M.**, Diamantopoulos, S. (2020). “Fragility and risk assessment of freestanding building contents”, *Earthquake Engineering and Structural Dynamics*, Vol. 49(10), pp: 1028-1048, doi: 10.1002/eqe.3276. [download](#)
- J37. Georgioudakis, N., **Fragiadakis, M.**, (2020). “Selection and Scaling of Ground Motions Using Multi-Criteria Optimization”, *Journal of Structural Engineering (ASCE)*, doi:10.1061/(ASCE)ST.1943-541X.0002811. [download](#)
- J36. Diamantopoulos, S., **Fragiadakis, M.**, (2019). “Seismic response assessment of rocking blocks and systems using simple beam elements”, *Earthquake Engineering and Structural Dynamics*, Vol. 48, pp. 689-708. doi: 10.1002/eqe.3157. [download](#)
- J35. Bakalis, K., Kazantzi, A., Vamvatsikos, D., **Fragiadakis, M.** (2018). “Seismic performance evaluation of liquid storage tanks using nonlinear static procedures”, *Journal of Pressure Vessel Technology*, doi: 10.1115/1.4039634. [download](#)
- J34. Bakalis, K., Vamvatsikos D., **Fragiadakis, M.**, (2017). “Seismic Risk Assessment of Liquid Storage Tanks via a Nonlinear Surrogate Model”, *Earthquake Engineering and Structural Dynamics*, Vol. 46(15), pp. 2851-2868, doi: 10.1002/eqe.2939. [download](#)
- J33. Bakalis, K., **Fragiadakis, M.**, Vamvatsikos D. (2017). “Surrogate Modelling for the Seismic Performance Assessment of Liquid Storage Tanks”, *Journal of Structural Engineering*, Vol. 143(4), pp. 04016199-1:13, doi: 10.1061/(ASCE)ST.1943-541X.0001667. [download](#)
- J32. Tsiatas, G.C., **Fragiadakis, M.** (2016). “Dynamic analysis and seismic response of circular arches with variable cross-section”, *Journal of Earthquake Engineering*, Vol. 22(2), pp. 191-210. doi: 10.1080/13632469.2016.1217805. [download](#)

- J31. Cimellaro, G., Tinebra, A., Renschler, C. and **Fragiadakis, M.** (2016). "New Resilience Index for Urban Water Distribution Networks." *Journal of Structural Engineering*, Vol. 142(8), pp. C4015014:1-13, doi: 10.1061/(ASCE)ST.1943-541X.0001433. [download](#)
- J30. Giovanis, D., **Fragiadakis, M.**, Papadopoulos, V. (2016). "Quick assessment of epistemic uncertainty using Incremental Dynamic Analysis and Neural Networks", *Bulletin of Earthquake Engineering*, Vol. 14, pp. 529-547. doi: 10.1007/s10518-015-9838-7 [download](#)
- J29. Xanthos, S., **Fragiadakis, M.**, Christodoulou, S. (2015). "Generating a seismic reliability assessment for an urban water distribution network", *Water Asset Management International (WAMI)*, Vol. 11(2), pp. 17-20. [download](#)
- J28. **Fragiadakis, M.**, Vamvatsikos D., Karlaftis M., Lagaros N., Papadrakakis M. (2015). "Seismic assessment of structures and lifelines", *Journal of Sound and Vibration*, Vol. 334, pp. 29-56. doi: 10.1016/j.jsv.2013.12.031 [download](#)
- J27. Christodoulou, S., **Fragiadakis, M.** (2014). "Vulnerability Assessment of Water Distribution Networks Considering Performance Data", *ASCE Journal of Infrastructure Systems*, Vol. 21(2), pp. 1812-1819. doi: 10.1061/(ASCE)IS.1943-555X.0000224 [download](#)
- J26. Zacharenaki, A., **Fragiadakis, M.**, Assimaki, D., Papadrakakis, M. (2014). "Bias assessment in Incremental Dynamic Analysis due to record scaling", *Soil Dynamics and Earthquake Engineering*, Vol. 67, pp. 158-168. doi: 10.1016/j.soildyn.2014.09.007 [download](#)
- J25. **Fragiadakis, M.**, Vamvatsikos, D., Aschheim, M. (2014). "Application of Nonlinear Static Procedures for Seismic Assessment of Regular RC Moment Frame Buildings", *Earthquake Spectra*, Vol. 30(2): 767-794. doi: 10.1193/111511EQS281M [download](#)
- J24. **Fragiadakis, M.**, Christodoulou, S. (2014). "Seismic reliability assessment of urban water networks", *Earthquake Engineering and Structural Dynamics*, Vol. 43(3), pp. 357-374. doi: 10.1002/eqe.2348 [download](#)
- J23. Christodoulou, S., Gagatsis, A., Xanthos, S., Kranioti, S., Agathokleous, A. and **Fragiadakis, M.** (2013). "Entropy-Based Sensor Placement Optimization for Waterloss Detection in Water Distribution Networks", *Journal of Water Resources Management*, Vol. 27(13), pp. 4443-4468. doi: 10.1007/s11269-013-0419-8 [download](#)
- J22. Psycharis, I., **Fragiadakis, M.**, Stefanou, I. (2013). "Seismic reliability assessment of classical columns subjected to near source ground motions", *Earthquake Engineering and Structural Dynamics*, Vol. 42(14), pp. 2061-2079. doi: 10.1002/eqe.2312 [download](#)
- J21. **Fragiadakis, M.**, Christodoulou, S., Vamvatsikos, D. (2013). "Reliability assessment of urban water distribution networks under seismic loads", *Journal of Water Resources Management*, Vol. 27(10), pp. 3729-3764. doi: 10.1007/s11269-013-0378-0 [download](#)

- J20. Dimakopoulou, V., **Fragiadakis, M.**, Spyrakos, C. (2013). “Influence of modelling parameters on the response of degrading systems to near-field ground motions”, *Engineering Structures*, Vol. 53, pp. 10-24. doi: 10.1016/j.engstruct.2013.03.008 [download](#)
- J19. Zacharenaki, A., **Fragiadakis, M.**, Papadrakakis, M. (2013). “Reliability-based optimum seismic design of structures using simplified performance estimation methods”, *Engineering Structures*, Vol. 52, pp. 707-717. doi: 10.1016/j.engstruct.2013.03.007 [download](#)
- J18. Assimaki, D., Li, W., **Fragiadakis, M.** (2012). “Site effects in structural response predictions of inelastic SDOF oscillators”, *Earthquake Spectra*, Vol. 28(3), pp. 859-88. doi: 10.1193/1.4000056 [download](#)
- J17. **Fragiadakis, M.**, Lagaros, N.D. (2011). “An overview to structural seismic design optimisation frameworks”, *Computers and Structures*, Vol. 89(11-12), pp. 1155-1165. doi: 10.1016/j.compstruc.2010.10.021 [download](#)
- J16. Lagaros, N.D., **Fragiadakis, M.** (2011). “Evaluation of ASCE-41, ATC-40 and N2 static pushover methods based on optimally designed buildings”, *Soil Dynamics and Earthquake Engineering*, Vol. 31(1), pp. 77-90. doi: 10.1016/j.soildyn.2010.08.007 [download](#)
- J15. Papachristidis, A., **Fragiadakis, M.** and Papadrakakis, M. (2010). “A 3D fibre beam-column element with shear modelling for the inelastic analysis of steel structures”, *Computational Mechanics*, Vol. 45, pp. 553-572. doi: 10.1007/s00466-010-0470-8 [download](#)
- J14. **Fragiadakis, M.**, Vamvatsikos, D. (2010). “Fast performance uncertainty estimation via pushover and approximate IDA”, *Earthquake Engineering and Structural Dynamics*, Vol. 39(6), pp. 683-703. doi: 10.1002/eqe.965 [download](#)
- J13. Vamvatsikos, D., **Fragiadakis, M.** (2010). “Incremental Dynamic Analysis for estimating seismic performance sensitivity and uncertainty”, *Earthquake Engineering and Structural Dynamics*, Vol. 39(2), pp. 141-163. doi: 10.1002/eqe.935 [download](#)
- J12. Stefanou, G., **Fragiadakis, M.** (2009). “Nonlinear dynamic analysis of frames with stochastic non-Gaussian material properties”, *Engineering Structures*, Vol. 31(8), pp. 1841-1850. doi: 10.1016/j.engstruct.2009.02.020 [download](#)
- J11. **Fragiadakis, M.**, Papadrakakis, M. (2008). “Modeling, analysis and reliability of seismically excited structures: Computational issues”, *International Journal of Computational Methods*, Vol. 5(4), pp. 483-511. doi: 10.1142/S0219876208001674 [download](#)
- J10. **Fragiadakis, M.**, Papadrakakis, M. (2008). “Performance-based optimum seismic design of reinforced concrete structures”, *Earthquake Engineering and Structural Dynamics*, Vol. 37(6), pp. 825-844. doi: 10.1002/eqe.786 [download](#)
- J9. Lagaros, N.D., **Fragiadakis, M.** (2007). “Fragility assessment of steel frames using Neural Networks”, *Earthquake Spectra*, Vol. 23(4), pp. 735-752. doi: 10.1193/1.2798241 [download](#)

- J8. Lagaros, N.D., Papadrakakis, M., **Fragiadakis, M.**, Stefanou, G. and Tsompanakis, Y. (2007). “Neural network aided stochastic computations and earthquake engineering”, *Computer Assisted Mechanics and Engineering Sciences (CAMES)*, Vol. 14(2), pp. 251-275. [download](#)
- J7. Lagaros, N.D., **Fragiadakis, M.** (2007). “Robust performance-based design optimization of steel moment resisting frames”, *Journal of Earthquake Engineering*, Vol. 11(5), pp. 752-772. doi: 10.1080/13632460601087229 [download](#)
- J6. Lagaros, N.D., **Fragiadakis, M.**, Papadrakakis, M. and Tsompanakis, Y. (2006). “Structural optimization: a tool for evaluating seismic design procedures”, *Engineering Structures*, Vol. 28(12), pp. 1623-1633. doi:10.1016/j.engstruct.2006.02.014 [download](#)
- J5. **Fragiadakis, M.**, Vamvatsikos, D. and Papadrakakis, M. (2006). “Evaluation of the influence of vertical irregularities on the seismic performance of a nine-storey steel frame”, *Earthquake Engineering and Structural Dynamics*, Vol. 35(12), pp. 1489-1509. doi: 10.1002/eqe.591 [download](#)
- J4. **Fragiadakis, M.**, Lagaros, N.D. and Papadrakakis, M. (2006). “Performance-based earthquake engineering using structural optimization tools”, *International Journal of Reliability and Safety*, Vol. 1(1/2), pp. 59-75. [download](#)
- J3. **Fragiadakis, M.**, Lagaros, N.D. and Papadrakakis, M. (2006). “Performance-based multiobjective optimum design of steel structures considering life cycle cost”, *Structural and Multidisciplinary Optimization*, Vol. 32(1), pp. 1-11. doi: 10.1007/s00158-006-0009-y [download](#)
- J2. Papadrakakis, M., Tsompanakis, Y., Lagaros, N.D. and **Fragiadakis, M.** (2004). “Reliability based optimization of steel frames under seismic loading conditions using evolutionary computation”, *Journal of Theoretical and Applied Mechanics on Computational Intelligence in Mechanics*, Vol. 42(3), pp. 585-608. [download](#)
- J1. Lagaros, N.D., **Fragiadakis, M.** and Papadrakakis, M. (2004). “Optimum design of shell structures with stiffening beams”, *AIAA Journal*, Vol. 42(1), pp. 175-184. Nikolaos D. Lagaros, Michalis Fragiadakis, and Manolis Papadrakakis. ”Optimum Design of Shell Structures with Stiffening Beams”, *AIAA Journal*, Vol. 42(1) (2004), pp. 175-184. doi:10.2514/1.9041 [download](#)

Book chapters

- BC16. **Fragiadakis, M.**, Stefanou, I., Psycharis, I. (2016). “ Vulnerability assessment of damaged classical multidrum columns ”, in *Computational modeling of masonry structures*

- using the discrete element method*, V. Sarhosis, K. Bagi, J.V. Lemos, G. Milani (Eds.), IGI Global. [download](#)
- BC15. Stefanou, I., **Fragiadakis, M.**, Psycharis, I. (2015). “Seismic reliability assessment of classical columns subjected to near source ground motions”, in *Seismic assessment, behavior and retrofit of heritage buildings and monuments*, I. Psycharis, S.V. Pantazopoulou and M. Papadrakakis (Eds.), Springer-Verlag, Berlin. [download](#)
- BC14. **Fragiadakis, M.** (2014). “Response spectrum analysis of structures subjected to seismic actions”, in *Encyclopedia in Earthquake Engineering*, Beer, M., Kougioumtzoglou, I.A., Patelli, E., Au, I.S.-K., (Eds.), Springer-Verlag, Berlin. [download](#)
- BC13. Papadopoulos, V., **Fragiadakis, M.** (2014). “Plastic hinge and plastic zone seismic analysis”, in *Encyclopedia in Earthquake Engineering*, Beer, M., Kougioumtzoglou, I.A., Patelli, E., Au, I.S.-K., (Eds.), Springer-Verlag, Berlin. [download](#)
- BC12. **Fragiadakis, M.**, Lagaros, N.D. (2014). “Design of structures using optimization algorithms”, A. Liakopoulos, E. Mistakidis, A. Giannakopoulos (Eds) in *Advances in Civil Engineering Research*, Civil Engineering Department, Thessaly, Greece. [download](#)
- BC11. **Fragiadakis, M.** (2013), “Performance-based seismic design of buildings using optimized structural designs”, in *New Trends in Seismic Design of Structures*, N.D. Lagaros, Y. Tsompanakis and M. Papadrakakis, (Eds.), Saxe-Coburg, UK, ISBN 978-1-874672-37-1. [download](#)
- BC10. **Fragiadakis, M.**, Vamvatsikos, D., Aschheim, M. (2011). “Static versus dynamic methods of analysis for estimating seismic performance”, *Protection of built environment against earthquakes*, M. Dolsek (Eds.), Springer-Verlag, Berlin. [download](#)
- BC9. Papachristidis, A., **Fragiadakis, M.**, Papadrakakis, M. (2010). “Inelastic analysis of frames under combined bending, shear and torsion”, *Computational Methods in Earthquake Engineering*, M. Papadrakakis, M. Fragiadakis, N.D. Lagaros (Eds.), Springer-Verlag, Berlin. [download](#)
- BC8. Stefanou, G., **Fragiadakis, M.** (2010), “Nonlinear Dynamic Response Variability and Reliability of Frames with Stochastic Non-Gaussian Parameter Uncertainty”, in *Computational Methods in Stochastic Dynamics*, M. Papadrakakis, G. Stefanou, V. Papadopoulos (Eds.), Springer-Verlag, Berlin. [download](#)
- BC7. Papadrakakis, M., Lagaros, N.D., **Fragiadakis, M.** (2010). “Neural Networks: Some Successful Applications in Computational Mechanics”, in *Waszczyszyn, Z. (Ed.): Advances of Soft Computing Engineering*, CISM Courses and Lectures W, Vol. 512, Springer Verlag. [download](#)

- BC6. Lagaros, N.D., **Fragiadakis, M.** (2009). “Implementation of Soft Computing in Earthquake Engineering”, in *Soft Computing in Civil and Structural Engineering*, B.H.V. Topping and Y. Tsompanakis, (Eds.), Saxe-Coburg Publications, Stirlingshire, Scotland, UK. [download](#)
- BC5. **Fragiadakis, M.**, Pinho, R. and Antoniou, S. (2008). “Modelling inelastic buckling of reinforcing bars under earthquake loading”, in *Progress in Computational Dynamics and Earthquake Engineering*, M. Papadrakakis, D.C. Charmpis, N.D. Lagaros and Y. Tsompanakis (Eds.), A.A. Balkema Publishers – Taylor & Francis. [download](#)
- BC4. Lagaros N.D, Tsompanakis, Y, **Fragiadakis, M.**, Plevris, V. and Papadrakakis, M. (2007). “Metamodel-based computing techniques for solving structural optimization problems considering uncertainties”, in *Structural optimization under uncertainties*, Y. Tsompanakis, N.D. Lagaros and M. Papadrakakis (Eds.), A.A. Balkema Publishers – Taylor & Francis. [download](#)
- BC3. Papadrakakis, M., **Fragiadakis, M.** and Lagaros, N.D. (2006). “Optimum performance-based reliability design of structures.” in *NATO-ARW conference: Extreme Man-Made and Natural Hazards in Dynamics of Structures*, Opatija, Croatia, May 28 - June 1 2006. [download](#)
- BC2. **Fragiadakis, M.**, Lagaros, N.D., Tsompanakis, Y. and Papadrakakis, M. (2006). “Improved seismic design procedures and evolutionary tools”, in *Intelligent Computational Paradigms in Earthquake Engineering*, N.D. Lagaros and Y. Tsompanakis (Eds.), Idea Group Publishing. [download](#)
- BC1. Lagaros, N.D., Tsompanakis, Y., **Fragiadakis, M.** and Papadrakakis, M. (2006). “Soft computing techniques in probabilistic seismic analysis of structures”, in *Intelligent Computational Paradigms in Earthquake Engineering*, N.D. Lagaros and Y. Tsompanakis (Eds.), Idea Group Publishing, Inc. [download](#)

Conference papers (“*” indicates the presenting author)

- C106. Sotiria Stefanidou*, Georgios Tsiatas, Panos Tsopelas, Georgios Baltzopoulos, Christos Giarlelis, Olga Markogiannaki, Despoina Skoulidou, **Michalis Fragiadakis**, Luka Lombardi, Spyridon Mavroulis, Aristo Plaka, Nikolaos Pnevmatikos, Efthimios Lekkas, Anastasios Sextos, “Structural and Geotechnical damage due to Albania Earthquake (26.11.2019) based on Rapid Visual Screening”, *International Symposium on Durras Earthquakes and Eurocodes*, 2020-ISDEE, 9-11 April 2020 Polytechnic University of Tirana, Albania. [download](#)

- C105. S. Diamantopoulos*, **Fragiadakis M**, Modelling planar rocking structures using simplified numerical models. *EURODYN 2020, XI International Conference on Structural Dynamics*, 22–24 June 2020, Athens, Greece. [download](#)
- C104. **Fragiadakis M***, L. DiSarno, A. Saetta, M.G. Castellano, I. Politopoulos, T. Chaudat, I. Psycharis, T.C. Hutchinson, I.E. Bal, E. Smyrou, L. Berto, I. Rocca, S. Vasic, S. Diamantopoulos., Experimental seismic assessment and protection of museum artefacts, *EURODYN 2020, XI International Conference on Structural Dynamics*, 22–24 June 2020, Athens, Greece. [download](#)
- C103. S. Diamantopoulos*, **Fragiadakis M**, The effect of building’s response on the fragility of freestanding symmetric or asymmetric contents. *EURODYN 2020, XI International Conference on Structural Dynamics*, 22–24 June 2020, Athens, Greece. [download](#)
- C102. **Fragiadakis M**, L. DiSarno, A. Saetta, M.G. Castellano, I. Rocca, S. Diamantopoulos, V. Crozet, I. Politopoulos, T. Chaudat, S. Vasic, I.E. Bal, E. Smyrou, I. Psycharis, T.C. Hutchinson, L. Berto Seismic response assessment and protection of statues and busts *Art Collections 2020, Historical Research Session (ARCO 2020, HR)*, May 28th-30th 2020, Università degli Studi di Firenze, Italy [download](#)
- C101. Adami C-E*, Vintzileou E, **Fragiadakis M**, Classification of monumental masonry building materials and historical constructions in Greece, *PROHITECH 2020, 4th International Conference on Protection of Historical Constructions*, T.P. Tasios, F M. Mazzolani, I. Vayas(eds.), Athens, Greece, 6–8 July 2020. [download](#)
- C100. Vamvatsikos D.*, **Fragiadakis M.**, Georgopoulos I., Koumouisis V.K., Koutsoyiannis D., Lachanas C.G., Manetas A., Melissianos V.E., Papadopoulos C., Papanikolopoulos K., and Toumpakari E., “The Archytas Intelligent Decision-Support System For The Protection Of Monumental Structures”, *PROHITECH 2020, 4th International Conference on Protection of Historical Constructions*, T.P. Tasios, F M. Mazzolani, I. Vayas(eds.), Athens, Greece, 6–8 July 2020. [download](#)
- C99. **Fragiadakis, M.***, Seismic protection of museum artifacts, *4th National Conference for Earthquake Engineering and Engineering Seismology*, 5-7 September, Athens, Greece. [download](#)
- C98. **Fragiadakis, M.***, Reliability and resilience assessment of urban water distribution networks, *4th National Conference for Earthquake Engineering and Engineering Seismology*, 5-7 September, Athens, Greece. [download](#)
- C97. Diamantopoulos S*, **Fragiadakis, M.**, Seismic fragility and risk assessment of rocking frame structures, *4th National Conference for Earthquake Engineering and Engineering Seismology*, 5-7 September, Athens, Greece. [download](#)

- C96. Vlachos N*, Diamantopoulos S, **Fragiadakis, M.**, Seismic response assessment of artefacts freestanding on a solid pedestal, *4th National Conference for Earthquake Engineering and Engineering Seismology*, 5-7 September, Athens, Greece. [download](#)
- C95. **Fragiadakis, M.***, DiSarno L., Saetta A., Castellano M.G., Psycharis I., Hutchinson T.C., Bal I.E., Smyrou E., Politopoulos I., Chaudat T., Berto L., Rocca I., Diamantopoulos S. (2019). Seismic response of statues and busts, *7th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, COMPDYN 2019*, Crete, Greece, 24-26 June 2019. [download](#)
- C94. Diamantopoulos S.*, **Fragiadakis, M.**, Sextos A. (2019). Dynamic Response of museum artefacts standing on a pedestal, *7th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, COMPDYN 2019*, Crete, Greece, 24-26 June 2019. [download](#)
- C93. Diamantopoulos S.*, **Fragiadakis, M.** (2019). “Modelling of rocking frames using simplified Finite Element Models”, *7th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, COMPDYN 2019*, Crete, Greece, 24-26 June 2019. [download](#)
- C92. **Fragiadakis, M.***, Diamantopoulos S. (2019). “Fragility and risk assessment of rocking building contents hosted in a four-story RC building”, *4th International Workshop on the Seismic Performance of Non-Structural Elements (SPONSE), SPONSE 2019*, Pavia, Italy, 22-23 May 2019. [download](#)
- C91. **Fragiadakis, M.*** Diamantopoulos, S. (2018). “Risk Assessment of Rocking Contents in Multistorey Buildings”, *16th European Conference on Earthquake Engineering (16ECE)*, 18-21 June 2018, Thessaloniki, Greece. [download](#)
- C90. Diamantopoulos S.*, Koutoulas K., **Fragiadakis, M.** (2018). “Seismic Response estimation of Rigid and flexible rocking frames using Simple finite element models”, *9th GRACM International Congress on Computational Mechanics*, Chania, 4-6 June 2018. [download](#)
- C89. **Fragiadakis, M.***, Palkanoglou, E., Simiriotis, N., Jodin, G., Rouchon, J.F., Braza, M. (2018). “Camber control of structures using Shape Memory Alloys”. *9th GRACM International Congress on Computational Mechanics*, Chania, 4-6 June 2018. [download](#)
- C88. Georgioudakis, M., **Fragiadakis, M.***, Papadrakakis, M. (2017). “Hazard-consistent multi-criteria selection and scaling of ground motion records using Evolutionary Algorithms”, *X International Conference on Structural Dynamics, EURODYN-2018*, Rome, Italy, 10-13 September 2017. [download](#)
- C87. **Fragiadakis, M.***, Kolokytha M.-E., Diamantopoulos, S. (2017). “Seismic risk assessment of rocking building contents in multistorey buildings”, *X International Conference*

- on Structural Dynamics, EUROODYN-2018*, Rome, Italy, 10-13 September 2017. [download](#)
- C86. Giouvanidis, A.I.*, **Fragiadakis, M.**, Dimitrakopoulos, E.G. (2017). “Vulnerability Assessment of Flag-Shaped Hysteretic Rocking Bridge Bents”, *6th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, COMPDYN-2017*, Rhodes Island, Greece, 15-17 June, 2017. [download](#)
- C85. Diamantopoulos, S.*, **Fragiadakis, M.** (2017). “Simple Models for the Seismic Response of Rigid or Flexible Blocks”, *6th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, COMPDYN-2017*, Rhodes Island, Greece, 15-17 June, 2017. [download](#)
- C84. Georgioudakis, M., **Fragiadakis, M.*** (2017). “Ground Motion Record Selection as a multi-objective Optimization Problem”, *6th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, COMPDYN-2017*, Rhodes Island, Greece, 15-17 June, 2017 (abstract only). [download](#)
- C83. **Fragiadakis, M.***, Kolokytha M.-E., Diamantopoulos, S. (2017). “Loss assessment of rocking non-structural components of buildings”, *6th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, COMPDYN-2017*, Rhodes Island, Greece, 15-17 June, 2017 (abstract only). [download](#)
- C82. Stewart, J.P.*, Lanzo, G, Alexander, N., Aversa, S., Bozzoni, F., Castiglia, M., Chiabrande, F., Chiaradonna, A., D’Onofrio, A., Dashti, S., De Risi, R., De Silva, F., Di Pietra, V., Di Sarno, L., Durante, M.G., Falcucci, E., Foti, S., **Fragiadakis, M.**, Franke, K., Galadini, F., Giallini, S., Gori, S., Grasso, N., Katsiveli, E., Kayen, R.E., Kishida, T., Mucciacciaro, M., Mylonakis, G., Pagliaroli, A., Penna, A., Psycharis, I., Reimschiessel, B., Santucci de Magistris, F., Scasserra, G., Sextos, A., Sica, S., Silvestri, F., Simonelli, A.L., Tommasi, P., Vintzilaiou, E., Zimmaro, P. (2017). “Engineering Reconnaissance following the August 24, 2016 M6.0 Central Italy Earthquake”, *16th World Conference on Earthquake (16WCEE)*, 9-13 January 2017, Santiago Chile. [download](#)
- C81. Balokas G.* **Fragiadakis, M.** (2016). “Seismic Reliability Assessment of Frame Structures with Flexibility-Based Stochastic Beam-Column Elements”, *ECCOMAS Congress 2016: VII European Congress on Computational Methods in Applied Sciences and Engineering*, Crete Island, Greece, 5–10 June 2016. [download](#)
- C80. **Fragiadakis, M.***, Psycharis, I., Mavroeides, G.P. (2016). “Parametric Investigation of The Dynamic Response of Rigid Blocks Subjected to Synthetic Near-Source Ground Motion Records”, *ECCOMAS Congress 2016: VII European Congress on Computational Methods in Applied Sciences and Engineering*, Crete Island, Greece, 5–10 June 2016.

[download](#)

- C79. Georgioudakis M.*, **Fragiadakis, M.** (2016). “Optimum Selection and Scaling of Ground Motion Records for The Seismic Assessment of Structures Using the Differential Evolution Algorithm”, *11th HSTAM International Congress on Mechanics Athens*, 27-30 May, Greece. [download](#)
- C78. Balokas G. **Fragiadakis, M.*** (2016). “Fragility assessment of an RC bridge with Stochastic System Properties”, *11th HSTAM International Congress on Mechanics*, Athens, 27-30 May, Greece. [download](#)
- C77. Tsiatas, G.C.*, **Fragiadakis, M.** (2015). “Seismic response and design of arched structures”, *8th GRACM International Congress on Computational Mechanics*, Volos, July 12-15 2015. [download](#)
- C76. Skandalos, K., **Fragiadakis, M***, Sextos, A. (2015). “Reliability Assessment Of Water Networks Considering Spatially Variable Seismic Ground Motion”, *SECED 2015 Conference: Earthquake Risk and Engineering Towards a Resilient World*, 9-10 July 2015, Cambridge UK. [download](#)
- C75. **Fragiadakis, M.***, Giovanis, D., Papadopoulos, V. (2015). “Assessment of Epistemic Uncertainty using trained Neural Networks and IDA”, *SECED 2015 Conference: Earthquake Risk and Engineering Towards a Resilient World*, 9-10 July 2015, Cambridge UK. [download](#)
- C74. Bakalis, K.*, Vamvatsikos, D., **Fragiadakis, M.** (2015). “Seismic Fragility Assessment of Steel Liquid Storage Tanks”, *Proceedings of the ASME 2015 Pressure Vessels & Piping Conference*, Boston, Massachusetts, USA. [download](#)
- C73. Bakalis, K*, **Fragiadakis, M.**, Vamvatsikos, D. (2015). “Surrogate Modelling of Liquid Storage Tanks for Seismic Performance Design and Assessment”, *Proceedings of the 5th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering*, Crete Island, Greece. [download](#)
- C72. **Fragiadakis, M.***, Giovanis, D., Papadopoulos, V. (2015). “Quick seismic reliability assessment of liquid storage tanks using neural networks”, *Proceedings of the 5th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering*, Crete Island, Greece. [download](#)
- C71. **Fragiadakis, M.**, Xanthos, S., Gagatsis, A. and Christodoulou, S* (2014). “Assessing the overall reliability of water distribution networks under seismic conditions”, *Proceedings 2014 Intelligent Distribution for Efficient and Affordable Supplies (Water IDEAS 2014)*, Bologna, Italy, Oct. 22-24, 2014. [download](#)

- C70. Christodoulou, S., **Fragiadakis, M.*** (2014). “Seismic reliability assessment of water distribution networks Extending the ALA guidelines”, *Proceedings of 2014 IWA World Water Congress*, Lisbon, Portugal, Sep. 21-26, 2014. [download](#)
- C69. Christodoulou, S.*, **Fragiadakis, M.** (2014). “Seismic Reliability Assessment of Lifeline Systems”, *Proceedings of the Fourteenth International Conference on Computing in Civil and Building Engineering (ICCCBE2014)*, Orlando, Florida, Jun. 23-25, 2014. [download](#)
- C68. Papageorgiou, A.*, **Fragiadakis, M.**, Vamvatsikos, D. (2014). “Life-cycle cost assessment of steel structures”, *Proceedings of the 8th National Conference on Steel Structures*, Tripoli, Greece, 2-4 October 2014. [download](#)
- C67. Bakalis, K.*, Vamvatsikos, D., **Fragiadakis, M.**, (2014). “Surrogate Modelling and Sensitivity Analysis of Steel Liquid Storage Tanks”, *Proceedings of the 8th National Conference on Steel Structures*, Tripoli, Greece, 2-4 October 2014. [download](#)
- C66. **Fragiadakis, M.***, Christodoulou, S. (2014). “Vulnerability assessment of water distribution networks using survival analysis”, *Second European Conference on Earthquake Engineering*, Istanbul, August 25-29. [download](#)
- C65. **Fragiadakis, M.***, Loukidis, D., Papanastasiou, P. “Seismic Capacity assessment of Kouris Earth Dam”, *Second European Conference on Earthquake Engineering*, Istanbul, August 25-29. [download](#)
- C64. Stefanou, I.*, **Fragiadakis, M.**, Psycharis, I.N. (2014). “Vulnerability assessment of classical columns with dislocated drums”, *Second European Conference on Earthquake Engineering*, Istanbul, August 25-29. [download](#)
- C63. Papageorgiou, A.V.*, **Fragiadakis, M.**, Vamvatsikos, D. (2014). “Seismic loss and sustainability assesment of reinforced concrete structures”, *Second European Conference on Earthquake Engineering*, Istanbul, August 25-29. [download](#)
- C62. Bakalis, K.*, Vamvatsikos, D., **Fragiadakis, M.** (2014). “Reliability assessment of liquid storage tanks”, *Second European Conference on Earthquake Engineering*, Istanbul, August 25-29. [download](#)
- C61. Christodoulou, S.*, **Fragiadakis, M.** (2013). “Reliability assessment of urban water distribution networks under seismic loads”, *Proceedings EWRA’s Eighth International Conference*, Jun. 26-29, Porto, Portugal. [download](#)
- C60. **Fragiadakis, M.***, Christodoulou, S. (2013). “Reliability Assessment of Pipe Networks under Seismic Loads”, *4th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering*, COMPDYN-2013, Kos Island, Greece, June 12-14, 2013. [download](#)

- C59. Psycharis I., **Fragiadakis, M.**, Stefanou, I.* (2013). “Seismic reliability assessment of classical columns subjected to near source ground motions”, *4th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering*, COMPDYN-2013, Kos Island, Greece, June 12-14, 2013. [download](#)
- C58. Zacharenaki, A.E.*, **Fragiadakis, M.**, Papadrakakis, M. (2013). “Measuring bias in Incremental Dynamic Analysis using bootstrap”, *4th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering*, COMPDYN-2013, Kos Island, Greece, June 12-14, 2013. [download](#)
- C57. **Fragiadakis, M.***, Vamvatsikos, D., Christodoulou, S. (2012). “Reliability assessment of urban water networks”, *15th World Conference on Earthquake Engineering*, September 24-28, Lisbon, Portugal. [download](#)
- C56. **Fragiadakis, M.***, Stefanou, G. (2012). “Seismic risk assessment of frame structures with stochastic properties”, *15th World Conference on Earthquake Engineering*, September 24-28, Lisbon, Portugal. [download](#)
- C55. **Fragiadakis, M.***, Vamvatsikos, D. (2011). “Qualitative comparison of Static Pushover versus Incremental Dynamic Analysis capacity curves”, *Proceedings of the 7th National Conference on Steel Structures*, Volos, Sept 29th – Oct 1st. [download](#)
- C54. **Fragiadakis, M.***, Lagaros, N.D. (2011). “Performance-Based Seismic Design Frameworks Using Structural Optimization”, *7th GRACM International Congress on Computational Mechanics*, 30 June - 2 July 2011, Athens, Greece. [download](#)
- C53. Zacharenaki, A.*, **Fragiadakis, M.**, Papadrakakis, M. (2011). “Optimal seismic design of structures using approximate methods”, *7th GRACM International Congress on Computational Mechanics*, 30 June - 2 July 2011, Athens, Greece. [download](#)
- C52. Zacharenaki, A.*, **Fragiadakis, M.**, Papadrakakis, M. (2011), “Optimal seismic design of steel structures using approximate methods”, *11th International Conference on Applications of Statistics and Probability in Civil Engineering*, August 1-4, 2011, Zurich, Switzerland. [download](#)
- C51. Stefanou, G.*, **Fragiadakis, M.** (2011), “Seismic Reliability Of Frame Structures With Non-Gaussian System Properties”, *11th International Conference on Applications of Statistics and Probability in Civil Engineering*, August 1-4, 2011, ETH Zurich, Switzerland. [download](#)
- C50. Stefanou, G.*, **Fragiadakis, M.** (2011). “Stochastic Finite Element Analysis of Frame Structures Subjected to Seismic Actions”, *3rd International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering*, COMPDYN-2011, Corfu, Greece, May 26-28, 2011. [download](#)

- C49. Stathi, C.*, **Fragiadakis, M.**, Papachristidis, A. and Papadrakakis, M. (2011). “Comparative assessment on modeling approaches for the seismic response of RC shear walls”, *3rd International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering*, COMPDYN-2011, Corfu, Greece, May 26-28, 2011. [download](#)
- C48. Zacharenaki, A.*, **Fragiadakis, M.**, Papadrakakis, M. (2011). “Optimal performance-based seismic design of structures using approximate performance estimation methods”, *3rd International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering*, COMPDYN-2011, Corfu, Greece, May 26-28, 2011. [download](#)
- C47. Dimakopoulou, V.*, **Fragiadakis, M.**, Spyrakos, C. (2011). “Seismic Response Sensitivity Of Degrading SDOF Systems due to Near-Field Ground Motions”, *3rd International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering*, COMPDYN-2011, Corfu, Greece, May 26-28, 2011. [download](#)
- C46. **Fragiadakis, M.**, Vamvatsikos, D. and Aschheim, M.* (2011), “Applicability of Nonlinear Static Procedures on RC Moment-Resisting Frames”, *ASCE 2011 Structures Congress*, Green Valey Ranch, Las Vegas, April 14-16, 2011. [download](#)
- C45. **Fragiadakis, M.**, Lagaros, N.D.* (2011). “Alternative performance-based frameworks for the seismic design of buildings”, *Sixth M.I.T. Conference on Computational Fluid and Solid Mechanics-Focus: Advances in Solids & Structures*, June 15-17, 2011 Cambridge, MA, U.S.A. [download](#)
- C44. **Fragiadakis, M.***, Papachristidis, A. and Papadrakakis, M. (2010). “Fiber beam-column element formulations for the inelastic analysis of steel and reinforced concrete structures subjected to combined bending-shear and torsion”, *9th HSTAM International Congress on Mechanics*, July 12-14, 2010, Limassol, Cyprus. [download](#)
- C43. Papachristidis, A*, **Fragiadakis, M.** and Papadrakakis, M. (2009) “Modeling of the inelastic behaviour of Reinforced Concrete structures considering shear deformations”, *16th National Conference on Reinforced Concrete Structures*, Pafos, Cyprus, October 21-23 (in Greek). [download](#)
- C42. Lagaros, N.D.*, **Fragiadakis, M.**, (2009). “Implementation of Soft Computing in Earthquake Engineering”, *The First International Conference on Soft Computing Technology in Civil, Structural and Environmental Engineering (CSC 2009)*, Funchal, Madeira, Portugal, 1-4 September 2009. [download](#)
- C41. **Fragiadakis, M.** and Vamvatsikos, D.* (2009), “Estimation of Uncertain Parameters using Static Pushover Methods”, *The 10th International Conference on Structural Safety and Reliability, ICOSSAR 2009*, Osaka, Japan, September 2009. [download](#)

- C40. Stefanou, G.* and **Fragiadakis, M.** (2009), Stochastic nonlinear dynamic response of frames with spatially varying non-Gaussian material properties, *The 10th International Conference on Structural Safety and Reliability, ICOSSAR 2009*, Osaka, Japan, September 2009. [download](#)
- C39. **Fragiadakis, M.***, Lanese, I., Pavese, A., Papadrakakis, M. (2009), “Experimental And Numerical Investigation of a Reinforced Concrete Building Designed For Gravity Loads Only”, *2nd International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, COMPDYN-2009*, 22-24 June 2009, Island of Rhodes, Greece. [download](#)
- C38. **Fragiadakis, M.***, Vamvatsikos, D. (2009), “Performance Uncertainty Estimation using Simplified Methods of Analysis”, *2nd International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, COMPDYN-2009*, 22-24 June 2009, Island of Rhodes, Greece. [download](#)
- C37. **Fragiadakis, M.***, Lagaros, N.D. (2009). “Structural Reliability Assessment With The Aid Of Neural Networks”, *2nd International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, COMPDYN-2009*, 22-24 June 2009, Island of Rhodes, Greece. [download](#)
- C36. Stefanou, G.* and **Fragiadakis, M.** (2009), “Nonlinear Dynamic Response Variability Of Frames With Stochastic Non-Gaussian Parameter Uncertainty”, *2nd International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, COMPDYN-2009*, 22-24 June 2009, Island of Rhodes, Greece. [download](#)
- C35. Zacharenaki, A.*, **Fragiadakis, M.**, Assimaki, D., Papadrakakis, M. (2009), “The Impact of Using Scaled Ground Motion Records for Seismic Capacity Assessment”, *2nd International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, COMPDYN-2009*, 22-24 June 2009, Island of Rhodes, Greece. [download](#)
- C34. Li, W., Assimaki, D.*, **Fragiadakis, M.** (2009), “Nonlinear Ground and Structural Response Variability due to Soil Response Modeling Uncertainty”, *2nd International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, COMPDYN-2009*, 22-24 June 2009, Island of Rhodes, Greece. [download](#)
- C33. Papachristidis, A., **Fragiadakis, M.***, Papadrakakis, M. (2009), “A shear-deformable fiber beam-column element for seismic analysis of steel structures”, *2nd International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, COMPDYN-2009*, 22-24 June 2009, Island of Rhodes, Greece. [download](#)
- C32. **Fragiadakis, M.***, Vamvatsikos, D. (2008). “Approximate Seismic Performance Uncer-

- tainty Estimation using Static Pushover Methods”, *14th World Conference on Earthquake Engineering (14WCEE)*, October 12-17, 2008, Beijing, China. [download](#)
- C31. Li, W., Assimaki, D. and **Fragiadakis, M.*** (2008). “Site response modeling variability in “rupture-to-rafter” ground motion simulations”, *14th World Conference on Earthquake Engineering (14WCEE)*, October 12-17, 2008, Beijing, China. [download](#)
- C30. Vamvatsikos, D., **Fragiadakis, M.*** (2008). “Seismic performance uncertainty of a 9-story steel frame with non-deterministic beam-hinge properties”, *14th World Conference on Earthquake Engineering (14WCEE)*, October 12-17, 2008, Beijing, China. [download](#)
- C29. Stefanou, G.*, **Fragiadakis, M.**, (2008). “Nonlinear dynamic analysis of frame structures with Stochastic non-Gaussian system properties”, *Proceedings of the 6th International Congress on Computational Mechanics (GRACM 08)*, 19 -21 June, Thessaloniki, Greece. [download](#)
- C28. **Fragiadakis, M.***, Papachiristidis, A., Papadrakakis M. (2008). “Seismic assessment of frame structures with a beam-column element based on the natural mode method”, *Proceedings of the 6th International Congress on Computational Mechanics (GRACM 08)*, 19-21 June, Thessaloniki, Greece. [download](#)
- C27. **Fragiadakis, M.***, Papadrakakis M. (2008). “Reliability-based optimization of RC structures”, *5th European Congress on Computational Methods in Applied Sciences and Engineering, ECCOMAS 2008*, 30 June – 4 July, Venice, Italy. [download](#)
- C26. **Fragiadakis, M.***, Lagaros, N.D., Tsompanakis, Y., and Papadrakakis M. (2007). “Evaluation of seismic analysis procedures via structural optimization”, *International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, COMPDYN-2007*, 13-15 June 2007, Rethymno, Greece. [download](#)
- C25. **Fragiadakis, M.***, Pinho, R. and Antoniou, S. (2007). “Modeling Inelastic Buckling of Reinforcing Bars under Earthquake Loading.”, *International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, COMPDYN 2007*, 13-15 June 2007, Rethymno, Greece. [download](#)
- C24. **Fragiadakis, M.***, Ioannidou, D., and Papadrakakis, M., (2007). “Assessment of Non-linear Static Analysis Procedures in the Framework of Performance-Based Design”, *8th National Congress on Mechanics (HSTAM2007)*, June 12-17, 2007, Patras, Greece. [download](#)
- C23. Tsompanakis, Y.*, Lagaros, N.D, **Fragiadakis, M.** and Papadrakakis, M., (2006). “Soft Computing Based Structural Reliability-Based Optimization of Real World Structures Under Seismic Loading Conditions”, *1st European Conference on Earthquake Engineering and Seismology*, Geneva, Switzerland, September 3-8. [download](#)

- C22. Vamvatsikos D.* and **Fragiadakis, M.** (2006). “Seismic performance sensitivity of a 9-story steel frame to plastic hinge modeling uncertainties”, *1st European Conference on Earthquake Engineering and Seismology*, Geneva, Switzerland, September 3-8. [download](#)
- C21. **Fragiadakis, M.***, and Papadrakakis, M. (2006). “Performance-Based Design of RC Buildings using Optimization Tools”, *1st European Conference on Earthquake Engineering and Seismology*, Geneva, Switzerland, September 3-8. [download](#)
- C20. Papadrakakis, M.*, Lagaros, N.D. and **Fragiadakis, M.** (2006). “Seismic design procedures in the framework of evolutionary based structural optimization”, *III European Conference on Computational Mechanics, Solids, Structures and Coupled Problems in Engineering (ECCM-2006)*, Lisbon, Portugal, June 5-8. [download](#)
- C19. **Fragiadakis, M.***, Lagaros, N.D. and Papadrakakis, M. (2005). “Optimization of irregular RC buildings under earthquake loading”, *6th European Conference on Structural Dynamics (EURODYN 2005)*, Paris, France, September 4-7. [download](#)
- C18. Papadrakakis, M.*, Lagaros, N.D., **Fragiadakis, M.** and Tsompanakis, Y. (2005). “Large-scale structural reliability-based optimization of steel frames under seismic loading”, *6th European Conference on Structural Dynamics (EURODYN 2005)*, Paris, France, September 4-7. [download](#)
- C17. **Fragiadakis, M.***, Vamvatsikos, D. and Papadrakakis, M. (2005) “Evaluation of the Influence of Vertical Stiffness Irregularities on the Seismic Response of a 9-story steel frame”, *Fourth European Workshop on the Seismic Behaviour of Irregular and Complex Structures*, Thessaloniki Greece, August 26-27. [download](#)
- C16. Tsompanakis, Y.*, Lagaros, N.D., **Fragiadakis, M.** and Papadrakakis, M. (2005). “Recent Advances” In Reliability-Based Structural Optimization Under Earthquake Loading, *WCSSMO6*, Rio de Janeiro, Brazil, 30th May – 3rd June 2005. [download](#)
- C15. Papadrakakis, M.* Lagaros, N.D. and **Fragiadakis, M.** (2005) “Recent developments in optimum design of structures under earthquake loading”, *8th USNCCM, US National Congress on Computational Mechanics*, Austin, USA, 24-28 July. [download](#)
- C14. Papaioannou, I.*, **Fragiadakis, M.**, and Papadrakakis, M. (2005), “Inelastic Analysis of Framed Structures using the Fiber Approach”, *Proceedings of the 5th International Congress on Computational Mechanics (GRACM 05)*, Limassol, Cyprus, 29 June – 1 July. [download](#)
- C13. Tsompanakis, Y., Lagaros, N.D., **Fragiadakis, M.*** and Papadrakakis, M. (2005). “Performance-based optimum design of structures considering uncertainties”, *5th GRACM International Congress on Computational Mechanics*, Limassol, Cyprus, 29 June - 1 July. [download](#)

- C12. **Fragiadakis, M.***, Lagaros, N.D. and Papadrakakis, M. (2005) “Risk assessment of structures using neural networks”, *5th GRACM International Congress on Computational Mechanics*, Limassol, Cyprus, 29 June - 1 July. [download](#)
- C11. Lagaros, N.D.*, Papadrakakis, M., **Fragiadakis, M.**, Stefanou, G. and Tsompanakis, Y. (2005). “Recent developments in Neural Network-aided stochastic computations and earthquake engineering”, *International Symposium on Neural Networks and Soft Computing in Structural Engineering (NNSC 2005)*, Cracow, Poland, June 30 - July 2. [download](#)
- C10. **Fragiadakis, M.***, Lagaros, N.D. and Papadrakakis, M. (2004). “Optimization of steel frames considering life cycle cost using Pushover Analysis”, *6th WCCM in conjunction with APCOM’04*, Beijing, China, Sept., 5-10. [download](#)
- C9. Papadrakakis, M.*, Lagaros, N.D. and **Fragiadakis, M.** (2004). “Structural optimization procedures under seismic loading”, *The International Conference on Computational Methods (ICCM2004)*, Singapore, December 15-17. [download](#)
- C8. Papadrakakis, M.*, Tsompanakis, Y., Lagaros, N.D. and **Fragiadakis, M.** (2004). “Reliability based optimization of structures under seismic excitation”, *4th European Congress on Computational Methods in Applied Sciences and Engineering (ECCOMAS 2004)*, Jyväskylä, Finland, July 24-28. [download](#)
- C7. Tsompanakis, Y.*, Papadrakakis, M., Lagaros, N.D. and **Fragiadakis, M.** (2004). “Reliability based optimization of steel frames under seismic loading”, *7th National Congress on Mechanics (HSTAM2004)*, June 24-26, 2004, Chania, Greece. [download](#)
- C6. Tsompanakis, Y.*, Papadrakakis, M., Lagaros, N.D. and **Fragiadakis, M.** (2004). “Optimization of steel frames subjected to seismic excitation”, *7th National Congress on Mechanics (HSTAM2004)*, June 24-26, 2004, Chania, Greece. [download](#)
- C5. Papadrakakis, M., **Fragiadakis, M.***, Lagaros, N.D. and Rizou, V. (2004). “Seismic design optimization of steel frames incorporating pushover analysis”, *ERCOFTAC Design Optimization Methods and Applications*, Athens, Greece, March 31 – April 2. [download](#)
- C4. **Fragiadakis, M.M.***, Lagaros, N.D. and Papadrakakis, M. (2003). “Structural optimization of stiffened shells using evolutionary algorithms”, *Second M.I.T. Conference on Computational Fluid and Solid Mechanics*, Cambridge, MA, USA, June 17-20. [download](#)
- C3. Papadrakakis, M.*, Lagaros, N.D. and **Fragiadakis, M.** (2002). “Structural optimization of stiffened shells using evolutionary algorithms”, *1st South-American Congress on Computational Mechanics, 3rd Brazilian Congress on Computational Mechanics, 7th Argentine Congress on Computational Mechanics, Santa Fe-Parana, Argentina*, October

28-31. [download](#)

- C2. Lagaros, N.D.*, **Fragiadakis, M.M.** and Papadrakakis, M. (2002). “Automatic structural optimization of stiffened shells”, *4th GRACM Congress on Computational Mechanics*, Patras, Greece, June 27-29. [download](#)
- C1. Papadrakakis, M., Lagaros, N.D. and **Fragiadakis, M.M.*** (2002). “Design code-based structural optimization of steel structures”, *4th National Conference on steel structures*, Patras, Greece, May 24-26. [download](#)

Dissertations/Theses

- O4. **Fragiadakis, M.** (2006). “Optimum Seismic Design of Structures using Nonlinear Analysis Methods”, PhD Thesis PhD in Civil Engineering (2002-2006), advisor: Prof. M. Papadrakakis, *National Technical University of Athens*, Greece. [download](#)
- O3. **Fragiadakis, M.** (2002). “Optimization of Stiffened Shells using Evolutionary Algorithms”, MSc Dissertation, advisor: Prof. M. Papadrakakis, *National Technical University of Athens*, Greece. [download](#)
- O2. **Fragiadakis, M.** (2001). “Nonlinear Material Modeling of Reinforcement Steel Bars under Transient Loading”, MSc Dissertation, advisor: R. Pinho, *Imperial College of Science Technology and Medicine, London, United Kingdom*, UK. [download](#)
- O1. **Fragiadakis, M.** (2000). “Material non-linear analysis of structures using the BEC natural beam element”, Diploma Dissertation, advisor: Prof. M. Papadrakakis, *National Technical University of Athens*, Greece. [download](#)

Skills and Qualifications

- Programming skills: Fortran, Matlab, C and Visual Basic.
- Structural analysis packages (Abaqus, SAP 2000, OpenSEES, etc)
- Microsoft Office, LaTeX.