



## **Michael N. Fardis**

Emeritus Professor, Civil Engineering Department, University of Patras, Patras, Greece,  
 Editor, *Journal of Earthquake Engineering and Structural Dynamics*, J.Wiley  
 Vice-Chairman, *CEN/TC250 "Structural Eurocodes"*, Comite Europeen de  
 Normalisation (CEN)  
 Honorary President, *International Federation for Structural Concrete* (federation  
 internationale du beton - **fib**)  
 Honorary Member, *International Association of Earthquake Engineering* (IAEE)  
 Corresponding Member, *Mexican Academy of Engineering*

### **INTERNATIONAL AWARDS**

1993 Wason Medal for Materials Research of the American Concrete Institute, for the best paper published in the Institute's Journals in 1992.

### **EDUCATION**

National Technical University of Athens, Diploma in Civil Engineering, June 1971.  
 M.I.T., Master of Science in Civil Engineering, Feb. 1977.  
 M.I.T., Master of Science in Nuclear Engineering, Feb. 1978.  
 M.I.T., Ph.D. in Structural Engineering, Feb. 1979.

### **ACADEMIC EXPERIENCE**

1972-1975: Assistant and Scientific Collaborator, National Technical University of Athens, Chair of Structural Analysis and Steel Bridges.  
 1975-1979: Research Assistant, M.I.T., Department of Civil Engineering.  
 Feb.1979-June 1982: Assistant Professor of Civil Engineering, M.I.T.  
 July 1982-June 1983: Associate Professor of Civil Engineering, M.I.T. (on leave from Sept. 1, 1982 to June 30, 1983).  
 April 1982-Aug. 2016: Professor, Department of Civil Engineering, University of Patras, Greece.  
 2000-present: Faculty Member, UME, Istituto Universitario degli Studi Superiori, Pavia.

### **EDITOR OF JOURNAL**

1/1/2016-.....: *Earthquake Engineering and Structural Dynamics* – the Journal of the International Association of Earthquake Engineering, J.Wiley.

### **ASSOCIATE EDITOR OF JOURNAL**

1/1-31/12/2015: *Bulletin of Earthquake Engineering* – the Journal of the European Association of Earthquake Engineering, Springer.

### **MEMBER - EDITORIAL BOARDS OF JOURNALS**

1998-present: *Structural Concrete* – the Journal of the International Federation for Structural Concrete (federation internationale du beton - **fib**), Ernst & Sohn/J.Wiley.  
 1996-31/12/2015: *Journal of Earthquake Engineering*, Taylor & Francis.  
 2002-31/12/2014: *Bulletin of Earthquake Engineering* – the Journal of the European Association of Earthquake Engineering, Springer.  
 2004-31/12/2015: *Earthquake Engineering and Structural Dynamics* – the Journal of the International Association of Earthquake Engineering, J.Wiley.  
 2010-31/12/2015: *Earthquake Spectra* – the Journal of the Earthquake Engineering Research Institute, USA.  
 2014-31/12/2015: *Earthquakes and Structures*, Technopress.

### **PRESIDENT OR DEPUTY PRESIDENT - INTERNATIONAL ORGANISATIONS**

2009-2010: President, federation internationale du beton (**fib**)  
 2007-2008: Deputy-President and President-elect for 2009-10, federation internationale du beton (**fib**)

### CHAIRMAN - INTERNATIONAL COMMITTEES

- 1999-2005: CEN/TC250/SC8: Subcommittee 8 for Eurocode 8: "Design of Structures for Earthquake Resistance" of TC250: Structural Eurocodes, Comite Europeen de Normalisation (CEN).
- 2011-2012: Awards Committee, federation internationale du beton (*fib*).
- 2007-2008: Commission 7: Seismic Design, federation internationale du beton (*fib*).
- 1998-02: Task Group 7.1 of Seismic Design Commission of federation internationale du beton (*fib*): "Assessment and Retrofit of Existing Structures".
- 1991-93: Task Group TGIII/6, Comite Eurointernational du Beton (CEB): Behaviour and Analysis of Reinforced Concrete Structures under Alternate Actions Inducing Inelastic Response.

### CHAIRMAN – SCIENTIFIC OR ORGANISATION COMMITTEES OF INTERNATIONAL CONFERENCES

- 2008-10: Chairman, Scientific Committee: 3<sup>rd</sup> *fib* Congress, June 2010, Washington DC.
- 2007-09: Chairman, Scientific Committee: *fib* Symposium "Concrete – 21<sup>st</sup> Century Superhero – Building a Sustainable Future", June 2009, London.
- 2001-03: Chairman, Organising Committee: *fib* Symposium "Concrete Structures in Seismic Regions", May 2003, Athens.

### VICE-CHAIRMAN - INTERNATIONAL COMMITTEES

- 2013-2022: Comite Europeen de Normalisation (CEN), Technical Committee CEN/TC250 "Structural Eurocodes"

### MEMBER - INTERNATIONAL SCIENTIFIC COMMITTEES

- 2016-present: Model Code 2020 Task Group (TG10.1), federation internationale du beton, (*fib*).
- 2015-present: Commission 9: Dissemination of Knowledge, federation internationale du beton (*fib*).
- 2013-present: Awards Committee, federation internationale du beton (*fib*).
- 2012-2021: Executive Committee, International Association of Earthquake Engineering (Director).
- 2007-2015: Comite Europeen de Normalisation (CEN), TC250/SC8, Maintenance Group of Eurocode 8: "Design of structures for earthquake resistance"; Part 1: General, seismic action, rules for buildings; Part 2: Bridges; Part 3: Assessment and retrofitting of buildings; Part 4: Silos, tanks and pipelines; Part 5: Foundations, retaining structures, geotechnical aspects; Part 6: Towers, masts and chimneys.
- 2002-2012: Presidium, federation internationale du beton (*fib*).
- 1999-2005: Comite Europeen de Normalisation (CEN), TC250/SC8, (ex-officio), Project Teams for revision of Eurocode 8: "Design of structures for earthquake resistance"; Part 1: General, seismic action, rules for buildings; Part 2: Bridges; Part 3: Assessment and retrofitting of buildings; Part 4: Silos, tanks and pipelines; Part 5: Foundations, retaining structures, geotechnical aspects; Part 6: Towers, masts and chimneys.
- 2007-2012: Model Code 2010 Committee (SAG5), federation internationale du beton, (*fib*).
- 1998-present: Technical Council, federation internationale du beton (*fib*).
- 1998-2014: Special Group on Dissemination of Knowledge (SAG2), federation internationale du beton (*fib*).
- 1998-2006 & 2009-2014: Seismic Design Commission, federation internationale du beton (*fib*).
- 2002-2013: Task Group 7.6, Seismic Design Commission: "Critical Comparison of Major Seismic Design Codes for Buildings", federation internationale du beton (*fib*).
- 2002-2007: Task Group 7.4, Seismic Design Commission: "Seismic Design and Assessment Procedures for Bridges", federation internationale du beton (*fib*).
- 1998-2002: Steering Committee, federation internationale du beton (*fib*).
- 1998-2002: Task Group 7.2, Seismic Design Commission: "Displacement-based Design and Assessment", federation internationale du beton (*fib*).
- 1998-2002: Special Activity Group on Information Technology in Concrete Design and Construction (SAG3), federation internationale du beton, (*fib*).
- 1997-1998: Management Group, federation international du Beton (*fib*).

- 1995-1998: Strategy Group, federation internationale du beton (*fib*).
- 1997-1998: Administrative Council, Comite Eurointernational du Beton (CEB).
- 1994-1998: Task Group TGIII/2: Seismic Design, Comite Eurointernational du Beton (CEB).
- 1991-1998: Permanent Commission III: Design, Comite Eurointernational du Beton (CEB).
- 1986-1991: General Task Group GTG22: Behaviour and Analysis of Reinforced Concrete Structures under Alternate Actions Inducing Inelastic Response, Comite Eurointernational du Beton (CEB).
- 1987-1991: Committee for Model Code 1990 (CMC90), Comite Eurointernational du Beton (CEB).
- 1985-1987: Revision Group for CEB/FIP 1978 Model Code for Concrete Structures, (CEB/MCRG), Comite Eurointernational du Beton (CEB).
- 1991-1994: Comite Europeen de Normalisation (CEN): TC250/SC8-Eurocode 8: Project Team 6 (PT6) on Repair and Strengthening.
- 1991-1994: Comite Europeen de Normalisation (CEN): TC250/SC8-Eurocode 8: Ad Hoc Group "Concrete" of Project Team 1 (PT1) – General.

#### **MEMBER, SCIENTIFIC COMMITTEES OF INTERNATIONAL CONFERENCES**

- 2017-2019: Scientific Committee, 5<sup>th</sup> International Conference. “Smart Monitoring, Assessment and Rehabilitation of Civil Structures” Aug. 2019, Potsdam.
- 2017-2019: Scientific Committee, *fib* Symposium "Concrete: Innovations in materials, design and structures", May 2019, Krakow.
- 2017-2018: Scientific Committee: 5<sup>th</sup> *fib* Congress, October 2018, Melbourne.
- 2016-2017: Scientific Committee: 4<sup>th</sup> International Conference. “Smart Monitoring, Assessment and Rehabilitation of Civil Structures” Sept. 2017, Zurich.
- 2016-2017: Scientific Committee, Concrete Innovation Conference and 11th High Performance Concrete Symposium, March 2017, Tromsø, Norway.
- 2016-2017: Scientific Committee, *fib* Symposium "High tech concrete: Where technology and engineering meet", June 2017, Maastricht, The Netherlands.
- 2015-2017: Scientific Committee 9th International Conference on Analytical Models and New Concepts in Concrete and Masonry Structures (AMCM2017), June 2017, Gliwice, PL.
- 2015-2016: Scientific Committee: 1st International Conference on Natural hazards and infrastructure - Protection, design, rehabilitation, June 2016, Chania, GR.
- 2015-2016: Scientific Committee: 11<sup>th</sup> International *fib* Ph.D Symposium in Civil Engineering, Aug. 2016, Tokyo.
- 2015-2016: International Advisory Committee: 2nd International Conference on Concrete Sustainability (ICCS16), June 2016, Madrid.
- 2014-2015: Scientific Committee: 3<sup>rd</sup> International Conference. “Smart Monitoring, Assessment and Rehabilitation of Civil Structures” Sept. 2015, Antalya.
- 2012-2014: Scientific Committee: 4<sup>th</sup> *fib* Congress, February 2014, Mumbai.
- 2013-2014: Scientific Committee: 10<sup>th</sup> International *fib* Ph.D Symposium in Civil Engineering, July 2014, Quebec.
- 2013-2014: International Advisory Committee, 8<sup>th</sup> International Conference Analytical Models and New Concepts in Concrete and Masonry Structures (AMCM2014), June 2014, Wroclaw.
- 2011-2013: Scientific Committee: 2<sup>nd</sup> Intern. Conf. “Smart Monitoring, Assessment, Rehabilitation of Civil Structures” Sept. 2013, Istanbul.
- 2011-2013: Scientific Committee: *fib* Symposium “Engineering a Concrete Future: Technology, Modeling & Construction” April 2013, Tel Aviv.
- 2011-2012: International Advisory Committee, First International Conference on Performance-based and Life-cycle Structural Engineering (PLSE 2012), Dec. 2012, Hong Kong.
- 2011-2012: Scientific Committee: 15<sup>th</sup> World Conference on Earthquake Engineering, Sept. 2012, Lisbon.
- 2011-2012: Scientific Committee: *fib* Symposium “Concrete Structures for Sustainable Community”, June 2012, Stockholm.
- 2011-2012: Scientific Committee: 9<sup>th</sup> International *fib* Ph.D Symposium in Civil Engineering, July 2012, Karlsruhe.

- 2010-2011: Scientific Committee: *fib* Symposium “Concrete engineering for excellence and efficiency”, June 2011, Prague.
- 2010-2011: International Advisory Committee, 7<sup>th</sup> International Conference Analytical Models and New Concepts in Concrete and Masonry Structures (AMCM2011), June 2011, Krakow.
- 2009-2010: Scientific Committee: 8<sup>th</sup> International *fib* Ph.D Symposium in Civil Engineering, June 2010, Copenhagen.
- 2009-2010: Scientific Committee: 14<sup>th</sup> European Conference on Earthquake Engineering, Aug.-Sept. 2010, Ohrid.
- 2008-2010: Scientific Committee: IABSE- *fib* Conference “Codes of Practice in Structural Engineering - Development and Needs for International Practice”, May 2010, Dubrovnik.
- 2007-2009: Scientific Committee: 9<sup>th</sup> International Symposium on Fiber Reinforced Polymer Reinforcement for Concrete Structures (FRPRCS-9), July 2009, Adelaide.
- 2007-2008: International Advisory Committee, 6<sup>th</sup> International Conference Analytical Models and New Concepts in Concrete and Masonry Structures (AMCM2008), June 2008, Lodz.
- 2007-2008 Scientific Committee: 7<sup>th</sup> International *fib* Ph.D Symposium in Civil Engineering, Sept. 2008, Stuttgart.
- 2007-2008: Scientific Committee: 8<sup>th</sup> International Symposium on Utilization of High-Strength and High-Performance Concrete, Oct. 2008, Tokyo.
- 2007-2008: Scientific Committee: *fib* Symposium “Tailor Made Concrete Structures”, May 2008, Amsterdam.
- 2006-2007: Scientific Committee: 8<sup>th</sup> International Symposium on Fiber Reinforced Polymer Reinforcement for Concrete Structures (FRPRCS-8), July 2007, Patras.
- 2006-2007: Scientific Committee: *fib* Symposium “Concrete Structures Inducing Development and Prosperity”, May 2007, Dubrovnik.
- 2005-2006: Scientific Committee: 3<sup>rd</sup> International Conference on Bridge Maintenance, Safety and Management (IABMAS'06), July 2006, Porto.
- 2004-2006: Scientific Committee: 2<sup>nd</sup> *fib* Congress, June 2006, Napoli.
- 2004-2006: Scientific Committee: 6<sup>th</sup> International *fib* Ph.D Symposium in Civil Engineering, August 2006, Zurich.
- 2004-2005: Scientific Committee: *fib* Symposium “Keep Concrete Attractive”, May 2005, Budapest.
- 2004-2005: Scientific Committee: IABSE Symposium “Structures and Extreme Events”, Sept. 2005, Lisbon.
- 2003-2004: Scientific Committee: 5<sup>th</sup> International Ph.D Symposium in Civil Engineering, June 2004, Delft.
- 2003-2004: Scientific Committee: *fib* Symposium “Segmental Construction in Concrete”, Nov. 2004, Delhi.
- 2001-2003: Scientific Committee: *fib* Symposium “Concrete Structures in Seismic Regions”, May 2003, Athens.
- 2001-2002: Scientific Committee: 12<sup>th</sup> European Conference on Earthquake Engineering, Sept. 2002, London.

#### **MEMBER, INTERNATIONAL SCIENTIFIC ADVISORY/EVALUATION COMMITTEES**

- 2017-18: Project Review Panel: ATC-134 "Calibration of seismic evaluation methodologies" Applied Technology Council, Redwood, California
- 2017: International Review Panel, National Practice Directive for seismic design, NEN, Delft, The Netherlands
- 2009-14: Scientific Committee: French R&D project “Behavior & Assessment of Special Construction Works - Cracking & Shrinkage (CEOS.fr)”.
- 2012-14: Single External Evaluator, Instituto de Engenharia de Estruturas, Territorio e Construção, Lisbon Technical University (Instituto Superior Tecnico)
- 2007-11: Scientific Advisory Permanent External Commission, Instituto de Engenharia de Estruturas, Territorio e Construção, Lisbon Technical University (Instituto Superior Tecnico)
- 2007: Evaluation Board of the Department of Structural Engineering of the Politecnico di Milano, Milano.
- 2007-09: Technical review panel, research network project DPC-RELUIS: “Consorzio Interuniversitario Rete dei Laboratori Universitari di Ingegneria Sismica”, Italy
- 2006-08: Expert Committee on Earthquake engineering and associated infrastructures, TAMARIS Seismic Laboratory CEA (Commissariat à l’Energie Atomique), Saclay, France.

2000-03: Proposal evaluation panels and Visit teams, NEES program, National Science Foundation, Washington, D.C.

#### **CHAIRMAN - GREEK COMMITTEES**

- 2012-2013: Awards Committee for best Doctoral Thesis and best international journal paper by young Greek engineers in the period 2009-2012, Greek Association of Earthquake Engineering  
 1998-2012: Head, Greek Delegation to the federation internationale du beton (*fib*).  
 2001-2006: Permanent Committee for the maintenance and application of the Greek Codes for Seismic Design and Concrete Structures, Earthquake Planning and Protection Organisation (EPPO).  
 1985-1987, 1994-2002: Permanent Scientific Committee on Earthquake Engineering, Earthquake Planning and Protection Organization (EPPO).  
 1989-1995: Technical Council of the University of Patras (1986-1989: Vice chairman).  
 1993: Committee for the evaluation of the design and the bids for the Congress Center of the University of Patras.  
 1988: Committee for the evaluation of the design and the bids for the Olympic Velodrome and the Olympic Swimming Center, General Secretariat for Athletics.

#### **MEMBER - GREEK COMMITTEES**

- 1998-2014: Technical Adjudication Panel for Rion-Antirion Bridge, Ministry of Public Works.  
 2000- present: Committee for the Code for Structural Interventions, Earthquake Planning and Protection Organisation (EPPO).  
 1992-1998: Greek Delegation to the Comite Eurointernational du Beton (CEB).  
 1989-1991, 1999-2005: Board of Directors, Earthquake Planning and Protection Organization (EPPO).  
 1994-1995: Committee for the Contract Negotiations for the Rion-Antirion Bridge, Greek Ministry of Public Works.  
 1993-1994: Committee for the evaluation of the bids for the Rion-Antirion Bridge, Ministry of Public Works.  
 1993: Committee for the evaluation of the design and the bids for the Motorway twin bridge over the Corinth Canal, Ministry of Public Works.  
 1992-2002: National Committee for the Evaluation of Seismic Risk,  
 1987-2000: Committee for the Code on Design and Construction of Reinforced Concrete Structures, Ministry of Public Works.  
 1987-2000: Committee for the Seismic Design Code, Ministry of Public Works.  
 1992-1993: Scientific Committee, European Center for Earthquake Protection and Prediction.

#### **OTHER PROFESSIONAL AND TECHNICAL EXPERIENCE**

- 1973-1975: Engineer, bridge design, Prof. Panayotounakos's Design Firm, Athens.  
 1988-1989: Director of the Organisation of School Buildings.  
 1980-2017: Consultant to the following:  
     Visidyne, Inc., Burlington, Mass. 1980-82  
     W.R. Grace and Co., Cambridge, Mass. 1980-82  
     The Celotex Corp., Tampa, Florida, 1981  
     NUCLEBRAS, Nuclen, Rio de Janeiro, 1981  
     Los Alamos Nat. Laboratory, New Mexico, 1982  
     Structural Designs Ltd., Athens, 1989-1991  
     Ministry of Public Works, Athens, 1993-2014  
     Hochtief, 1997-1999  
     Rio-Antirio Bridge Concessionaire, 1998-2014  
     International Atomic Energy Agency, Vienna, 2004  
     Archirodon Construction, Athens, 2013  
     Architectural Institute of Korea and Korea University, Seoul, 2015  
     Standards Institution of Israel, Tel Aviv, 2016, 2018  
     Dr. E.Leibovich Consulting Engineers Ltd, Tel Aviv, 2016-17

NEN, Standards Institution of the Netherlands, Delft, 2017

### CITATIONS

**Google Scholar** (<https://scholar.google.gr/citations?user=dBDLVwEAAAAJ&hl=en>): about **10250**

**Scopus** (<https://www.scopus.com/authid/detail.uri?authorId=7006644796>): about **4700 (h-index 32)**

**Web of Science**: about **3750**.

### PUBLICATIONS

#### Books

1. M.N. FARDIS, E.C. CARVALHO, P. FAJFAR and A. PECKER Seismic Design of Concrete Buildings to Eurocode 8, CRC Press, Taylor & Francis, 2015, 424p, ISBN 978-1466559745
2. B. KOLIAS, M.N. FARDIS and A. PECKER Designers' Guide to Eurocode 8: Design of bridges for earthquake resistance, EN 1998-2. Institution of Civil Engineers (ICE) Publishing, London, 2012, 250p, ISBN 978-0-7277-5735-7.
3. M.N. FARDIS Seismic Design, Assessment and Retrofitting of Concrete Buildings (based on EN-Eurocode 8). Springer Science+Business Media BV, Dordrecht, 2009, 766p, ISBN 978-1-4020-9841-3
4. M.N. FARDIS, E. CARVALHO, A. ELNASHAI, E. FACCIOLI, P. PINTO and A. PLUMIER. Designers' Guide to EN 1998-1 and EN 1998-5: Eurocode 8: Design of Structures for Earthquake Resistance. General Rules, Seismic Actions, Design Rules for Buildings, Foundations and Retaining Structures. Thomas Telford Publishers, London, 2005, 2009, 2011, 285p, ISBN 07277-3348-6 (published in Italian by EPC Editore, 2011, ISBN: 978-88-6310-276-5, in Greek by Kleidarithmos, S.A., 2011, ISBN: 978-960-461-452-3 and in Russian by Moscow State University for Civil Engineering, 2013, ISBN: 978-5-7264-0731-9)
5. M.N. FARDIS, Design of Earthquake Resistant Concrete Structures (in Greek), 296p, Hellenic Open University, 2003, ISBN 960-538-351-9.
6. M.N. FARDIS and S.H. DRITSOS, Assessment of Seismic Damage, Repair and Retrofitting of Concrete Buildings (in Greek), 335p, Hellenic Open University, 2003, ISBN 960-538-235-0.
7. M.N. FARDIS, Prestressed Concrete (in Greek), 1<sup>st</sup> Edition: 196 p., University of Patras Publishing House, Patras, 1986; 2<sup>nd</sup> Edition: 208p, University of Patras Publishing House, 1997. 3<sup>rd</sup> Edition: 222p, University of Patras Publishing House, 2001.
8. M.N. FARDIS, Reinforced Concrete (in Greek), 1<sup>st</sup> Edition: Vol. I, 224 p., Vol. II, 242 p., Vol. III, 162 p., Greek Textbook Publishing Organization, Athens, 1985; 2<sup>nd</sup> Edition: Vol. I, 341p, Vol. II, 339p, Vol. III, 248p. University of Patras Publishing House, 1997; 3<sup>rd</sup> Edition: Vol. I, 336p, Vol. II, 353p, Vol. III, 355p., University of Patras Publishing House, 2007.
9. M.N. FARDIS, Design of Concrete Bridges (in Greek), University of Patras Publishing House, Patras, 149p. 2006.

#### Chapters in Books

1. M.N. FARDIS, Member - Type Models for the Nonlinear Seismic Response Analysis of Reinforced Concrete Structures, in "Experimental and Numerical Methods in Earthquake Engineering", J. Donea and P.M. Jones, Eds, Kluwer Academic Publishers, ISBN 0-7923-1434-4, Dordrecht, The Netherlands, 1991, pp. 247-280.
2. M.N. FARDIS, Chapter 6: Finite Element Modeling of Reinforced Concrete, in "Behaviour and Analysis of Reinforced Concrete Structures under Alternate Actions inducing Inelastic Response. Vol. 1: General Models", Comite Eurointernational du Beton, Bull. No. 210, Laussane, July 1991 and in "RC Elements under Cyclic Loading", Comite Eurointernational du Beton, Bull. No. 231, Thomas Telford Publications, London, ISBN 0-7277-2086-4, April 1996, pp. 134-167.
3. M.N. FARDIS and F. FILIPPOU, Chapter 1: Frame Members in Bending with or without Axial Force, in "Behaviour and Analysis of Reinforced Concrete Structures under Alternate Actions inducing Inelastic Response. Vol. 2: Frames", Comite Eurointernational du Beton, Bull. No. 220, Laussane, May 1994, and "RC Frames under Earthquake Loading", Comite Eurointernational du Beton, Bull. No. 231, Thomas Telford Publications, London, ISBN 0-7277-2085-6, May 1996, pp. 1-102.
4. M.N. FARDIS and J-D WOERNER, Chapter 2: Frame Members in Flexure and Axial Force with High

- Shear, in "Behaviour and Analysis of Reinforced Concrete Structures under Alternate Actions inducing Inelastic Response. Vol. 2: Frames", Comite Eurointernational du Beton, Bull. No. 220, Laussane, May 1994 and in "RC Frames under Earthquake Loading", Comite Eurointernational du Beton, Bull. No. 231, Thomas Telford Publications, London, ISBN 0-7277-2085-6, May 1996, pp. 103-137.
5. M.N. FARDIS Chapter 9: Reinforced Concrete Structures, in "Computer Analysis and Design of Earthquake Resistant Structures - A Handbook", Computational Mechanics Publications, Southampton, ISBN 1-85312-374-9, 1997, pp. 441-532.
  6. M.N. FARDIS and T.B. PANAGIOTAKOS, Displacement-based Design of RC Buildings: Proposed Approach and Application, in "Seismic Design Methodologies for the Next Generation of Codes", (P. Fajfar and H. Krawinkler, eds.), Balkema, Rotterdam, ISBN 90-5410-928-9, 1997, pp. 195-206.
  7. A. ELNASHAI, M.N. FARDIS and A.J. KAPPOS Chapter 5: Selected Case Studies, in "Seismic Design of RC Structures for Controlled Inelastic Response", Comite Eurointernational du Beton, Bull. No.236, Lausanne, March 1997, ISBN 2-88394-035-5, pp. 79-158, and Bull.240, Thomas Telford Ltd., London, ISBN 0-7277-2641-2, 1998, pp.60-132.
  8. M.N. FARDIS, Chapter 3: "Review of Seismic Assessment Procedures", in "Seismic Assessment and Retrofit of RC Buildings" *fib* Bull. No.24, federation internationale du beton, Lausanne, ISBN 2-88394-064-9, pp. 37-90, May 2003
  9. M.N. FARDIS, A. ELNASHAI and T.C. TRIANTAFILLOU Chapter 5: "Seismic Retrofitting Techniques", in "Seismic Assessment and Retrofit of RC Buildings" *fib* Bull. No.21, federation internationale du beton, Lausanne, ISBN 2-88394-064-9, pp. 151-228, May 2003
  10. M.N. FARDIS, T. PANAGIOTAKOS, D. BISKINIS and A. KOSMOPOULOS, "Seismic Assessment of Existing RC Buildings", in "Seismic Assessment and Rehabilitation of Existing Buildings", S.T. Wasti & G. Ozcebe, eds. NATO Science Series, IV. Earth and Environmental Sciences - Vol.29, Kluwer Academic Publishers, Dordrecht, pp. 215-244, ISBN 1-4020-1624-7, May 2003.
  11. S.N. BOUSIAS and M.N. FARDIS, "Experimental Research on Vulnerability and Retrofitting of Old-Type RC Columns under Cyclic Loading", in "Seismic Assessment and Rehabilitation of Existing Buildings", S.T. Wasti & G. Ozcebe, eds. NATO Science Series, IV. Earth and Environmental Sciences - Vol.29, Kluwer Academic Publishers, Dordrecht, pp. 245-268, ISBN 1-4020-1624-7, May 2003.
  12. M.N. FARDIS, Chapter 5: "Displacement Capacity of Members and Systems" in "Displacement-based Design of RC Buildings" *fib* Bull. No.25, federation internationale du beton, Lausanne, ISBN 2-88394-065-7, pp. 107-136, May 2003
  13. M.N. FARDIS, A European Perspective for Performance-Based Seismic Design, in "Performance-Based Seismic Design - Concepts and Implementation" (P.Fajfar, H.Krawinkler, eds.), PEER Report 2004/05 University of California, Berkeley, ISBN 09762060-0-5, p. 1-13, Sept. 2004.
  14. M.N. FARDIS, "Design Rules for Seismic Retrofitting with FRPs According to Eurocode 8 and their Background" in "Retrofitting of Concrete Structures through Externally Bonded FRPs, with emphasis on Seismic Applications" *fib* Bull. No.35, federation internationale du beton, Lausanne, ISBN 2-88394-075-4, pp. 199-217, April 2006.
  15. S.N. BOUSIAS, M. N. FARDIS, A.-S. SPATHIS and D. BISKINIS, Shotcrete or FRP Jacketing of Concrete Columns for Seismic Retrofitting, in: "Advances in Earthquake Engineering for Urban Risk Reduction", S.T. Wasti & G. Ozcebe, eds. NATO Science Series, IV. Earth and Environmental Sciences - Vol.66, Kluwer Academic Publishers, Dordrecht, pp. 33-46, ISBN 1-4020-4569-7, 2006.
  16. D.E. BISKINIS and M.N. FARDIS, Sections: I-2.2.1:"Effective elastic stiffness of RC members for use in linear analyses emulating nonlinear ones" pp.44-52, I-3.1:"Acceptance and design criteria in terms of deformations for RC members under uni- or bi-directional cyclic loading at different performance levels" pp.61-79, II-2.2.1:"Simple estimation of secant-to-yield stiffness of concrete piers on the basis of test results" pp.111-122 & II-3.1.1: "Simple rules for the estimation of the flexure- or shear-controlled cyclic ultimate deformation of concrete piers, on the basis of test results" pp.130-133, in "Guidelines for Displacement-based Design of Buildings and Bridges" Lessloss-2007/05, European School for Advanced Studies in Reduction of Seismic Risk, ROSE School, EUCENTRE, Pavia, Italy, (Fardis M.N., Editor) 2007, ISBN 2-88394-075-4
  17. V. BARDAKIS, T.B. PANAGIOTAKOS and M.N. FARDIS, Sections: II-1.2:"Design of bridge piers

- directly on the basis of displacement and deformation demands, without iterations with analysis” pp. 111-122, in ““Guidelines for Displacement-based Design of Buildings and Bridges” Lessloss-2007/05, European School for Advanced Studies in Reduction of Seismic Risk, ROSE School, EUCENTRE, Pavia, Italy, (Fardis M.N., Editor) 2007, ISBN 2-88394-075-4
18. M.N. FARDIS, "Ertüchtigung von seismisch beanspruchten Betonbauwerken", Kapitel X, Beton Kalender 2008, Teil II, Ernst & Sohn/Wiley, ISBN 978-3-433-01839-2, pp.275-308, 2008
  19. D.E. BISKINIS and M.N. FARDIS, Chapter 15: “Upgrading of Resistance and Cyclic Deformation Capacity of Deficient Concrete Columns” , in “Seismic Risk Assessment and Retrofitting with special emphasis on existing low rise structures” (Ilki A et al, eds.), Springer Dordrecht, ISBN 978-90-481-2680-4, 2009.
  20. M.N. FARDIS and G. TSIONIS, Chapter 3: “Specific rules for design and detailing of concrete building. Design for DCM and DCH. Illustration of elements design" in "Eurocode 8: Seismic design of buildings- Worked examples" (B. Acun, A. Athanasopoulou, E. Carvalho, M.N. Fardis and A. Pinto, eds.) JRC Scientific and Technical Report, European Commission, Joint Research Centre, Institute for the Protection and Security of the Citizen, EUR 25204EN, ISBN 978-92-79-23068-4, 2012, 53-82.
  21. M.N. FARDIS, A. SCHETAKIS and E. STREPELIAS, Chapter 15: “Seismic Rehabilitation of Concrete Buildings by Converting Frame Bays into RC Walls”, in “Seismic Evaluation and Rehabilitation of Structures” (Ilki A & Fardis M.N., eds.) Springer, Dordrecht, ISBN 978-3-319-00457-0, 2013, 261-280.
  22. E. STREPELIAS, X. PALIOS, S.N. BOUSIAS and M.N. FARDIS, Chapter 16: “Pseudo-Dynamic Tests of 4-Storey Non-Ductile Frames with RC Infilling of the Bay”, in “Seismic Evaluation and Rehabilitation of Structures” (Ilki A & Fardis M.N., eds.) Springer, Dordrecht, ISBN 978-3-319-00457-0, 2013, 281-301.
  23. M.N. FARDIS, Sections 1.3: “Europe” pp. 48-86, 2.3: "Beams" pp. 180-183 and 2.4 "Columns" pp. 184-189 in “Critical Comparison of Major Seismic Codes in Buildings” *fib* Bull. No.69, federation internationale du beton, Lausanne, ISBN 978-2-88394-109-0, 2013.
  24. G. TSIONIS, M.N. FARDIS. Chapter 9: "Fragility functions of road and railway bridges" in "SYNER-G: Typology definition and fragility functions for physical elements at seismic risk" (K. Pitilakis, H. Crowley, A.M. Kaynia, eds.) Springer Verlag Berlin Heidelberg, ISBN 978-94-007-7871-9, 2014.
  25. A. PAPAIIA, G. TSIONIS, M.N. FARDIS. Chapter 23: “Seismic fragility of RC buildings designed to Eurocodes 2 and 8” in “Performance-Based Seismic Engineering: Vision for an Earthquake Resilient Society” (M. Fischinger, ed.) Springer, Dordrecht, ISBN 978-94-017-887, 2014, 315-332.
  26. M.N. FARDIS, Chapter 7: "From performance- and displacement-based assessment of existing buildings per EN1998-3 to design of new concrete structures in *fib* MC2010", in "Perspectives in European Earthquake Engineering and Seismology" (A. Ansal, ed.), Springer Verlag Berlin Heidelberg, ISBN 978-3-319-07117-6, 2014.
  27. M.N. FARDIS, "Reinforced Concrete Structures in Earthquake-Resistant Construction", in Encyclopedia of Earthquake Engineering (Beer M et al, eds.), Springer Verlag, Berlin-Heidelberg, ISBN 978-3-642-35343-7, 2015
  28. M.N. FARDIS, "European Structural Design Codes: Seismic Actions", in Encyclopedia of Earthquake Engineering (Beer M et al, eds.), Springer Verlag, Berlin-Heidelberg, ISBN 978-3-642-35343-7, 2015
  29. M.N. FARDIS, Chapter 8: "EN 1998-3: Seismic assessment and retrofitting of existing buildings", in "Eurocodes: background and applications. Elaboration of maps for climatic and seismic actions for structural design with the Eurocodes", by P. Formichi, L. Danciu, S. Akkar, O. Kale, N. Malakatas, P. Croce, D. Nikolov, A. Gocheva, P. Luechinger, M. Fardis, A. Yakut, R. Apostolska, M.L. Sousa, S. Dimova, A. Pinto; Publications Office of the European Union, ISBN 978-92-79-63702-5, 2016, pp. 141-156.
  30. M.N. FARDIS, S. GRAMMATIKOU and D.E. BISKINIS Member models for the practical performance-based seismic evaluation of concrete buildings through nonlinear analysis. PESDES 2017 Performance-Based Seismic Design of Structures (D. Beskos, Y. Zhou, J. Qian, X. Lu Eds.) Oct. 2017
  31. M.N. FARDIS, Chapter 2: "Synergies and conflicts between seismic design and design for other extreme actions" in "Earthquake Engineering and Structural Dynamics in Memory of Ragnar Sigbjörnsson" (R. Rupakhety, S. Olafsson, Eds), Springer Verlag Berlin Heidelberg, ISBN 978-3-319-62098-5, Jan. 2018,

pp. 31-71.

32. M.N. FARDIS, Chapter 4: "From Force- to Displacement-Based Seismic Design of Concrete Structures and Beyond" in "Recent Advances in Earthquake Engineering in Europe" (K. Pitilakis, ed.), Springer Verlag Berlin Heidelberg, 2018. DOI: 10.1007/978-3-319-75741-4\_4

### **Editor of Books**

1. "Behaviour and Analysis of Reinforced Concrete Structures under Alternate Actions inducing Inelastic Response. Vol. 2: Frames", Comite Eurointernational du Beton, Bull. No. 220, ISBN 2-88394-023-1, 380p, Lausanne, 1994.
2. "RC Frames under Earthquake Loading", Comite Eurointernational du Beton, Bull. No.230, Thomas Telford Publications, London, ISBN 0-7277-2085-6, May 1996, 303p,
3. "Experimental and Numerical Investigations on the Seismic Response of R.C. Infilled Frames and Recommendations for Code Provisions", ECOEST/PREC8 Report No. 6, Laboratorio Nacional de Engenharia Civil Publications, Lisbon, ISBN 972-49-1702-9, Nov. 1996, 199p.
4. "Shear Walls", ECOEST/ICONS Rep. 5 (with J.M. Reynouard), Laboratorio Nacional de Engenharia Civil Publications, Lisbon, ISBN 972-49-1889-0, July 2001, 240p.
5. "Innovative Seismic Design Concepts", ECOEST/ICONS Rep. 3 (with G.M. Calvi), Laboratorio Nacional de Engenharia Civil Publications, Lisbon, ISBN 972-49-1891-2, Jan. 2002, 206p.
6. "Seismic Assessment and Retrofit of RC Buildings" *fib* Bull. No.24, Federation Internationale du Beton, Lausanne, ISBN 2-88394-064-9, May 2003, 325p.
7. "SPEAR: Seismic Performance Assessment and Rehabilitation" Proceedings of the International Workshop, Ispra, Italy. ISBN 92-894-9923-0, Office of Official Publications of the European Unions, Luxembourg, April 2005 (with P. Negro), 304p.
8. "Retrofitting of Concrete Structures through Externally Bonded FRPs, with emphasis on Seismic Applications" *fib* Bull. No.35, Federation Internationale du Beton, Lausanne, ISBN 2-88394-075-4, April 2006, 217p.
9. "Guidelines for Displacement-based Design of Buildings and Bridges", LESSLOSS Report No. Lessloss-2007/05, European School for Advanced Studies in Reduction of Seismic Risk, ROSE School, EUCENTRE, Pavia, Italy, ISBN 978-88-6198-009-9, July, 2007, 220p.
10. "Advances in Performance-based Earthquake Engineering" Springer, Dordrecht, ISBN 978-90-481-8745-4, June 2010, 486p.
11. "Role of Seismic Testing Facilities in Performance-based Earthquake Engineering" Springer, Dordrecht, ISBN 978-94-007-1976-7, Oct. 2011 (with Z. Rakicevic), 384p.
12. "Innovative Materials and Techniques in Concrete Construction" Springer, Dordrecht, ISBN 978-94-007-1996-5, Oct. 2011, 379p.
13. "Seismic Evaluation and Rehabilitation of Structures" Springer, Dordrecht, ISBN 978-3-319-00457-0, August 2013 (with A. Ilki), 455p.
14. "Eurocode 8: Seismic design of buildings- Worked examples" (with B. Aucun, A. Athanasopoulou, E. Carvalho, A. Pinto.) JRC Scientific and Technical Report, European Commission, Joint Research Centre, Institute for the Protection and Security of the Citizen, EUR 25204EN, 2012. ISBN 978-92-79-23068-4, 502p.
15. "Eurocodes: background and applications. Elaboration of maps for climatic and seismic actions for structural design with the Eurocodes" (with P. Formichi, L. Danciu, S. Akkar, O. Kale, N. Malakatas, P. Croce, D. Nikolov, A. Gocheva, P. Luechinger, A. Yakut, R. Apostolska, M.L. Sousa, S. Dimova, A. Pinto) Publications Office of the European Union, ISBN 978-92-79-63702-5, 2016.

### **Papers in Refereed International Journals**

1. M.N. FARDIS and C.A. CORNELL, Containment Liner Seismic Reliability under Statistical Uncertainty, Nuclear Engineering and Design, Vol. 49, No. 3, Sept. 1978, pp. 279-294.
2. M.N. FARDIS and C.A. CORNELL, Seismic Soil-Containment Interaction: Pipe Safety, Journal of the Engineering Mechanics Division, ASCE, Vol. 104, No. EM6, Proc. Paper 14218, December 1978, pp. 1353-1370.

3. M.N. FARDIS, C.A. CORNELL, and J.E. MEYER, Accident and Seismic Containment Reliability, *Journal of the Structural Division, ASCE*, Vol. 105, No. ST1, Proc. Paper 14305, January 1979, pp. 67-83.
4. M.N. FARDIS and O. BUYUKOZTURK, A Shear Transfer Model for Reinforced Concrete, *Journal of the Engineering Mechanics Division, ASCE*, Vol. 105, No. EM2, Proc. Paper 14507, April 1979, pp. 255-275.
5. M.N. FARDIS and O. BUYUKOZTURK, Shear Stiffness of Concrete by Finite Elements, *Journal of the Structural Division, ASCE*, Vol. 106, No. ST6, Proc. Paper 14563, June 1980, pp. 1311-1327.
6. M.N. FARDIS and C.A. CORNELL, Analysis of Coherent Multistate Systems, *IEEE Transactions on Reliability*, Vol. R-30, No. 2, June 1981, pp. 117-122.
7. M.N. FARDIS and D. VENEZIANO, Statistical Analysis of Sand Liquefaction, *Journal of the Geotechnical Engineering Division, ASCE*, Vol. 107, No. GT10, Proc. Paper 16604, Oct. 1981, pp. 1361-1377.
8. M.N. FARDIS and D. VENEZIANO, Estimation of SPT-N and Relative Density, *Journal of the Geotechnical Engineering Division, ASCE*, Vol. 107, No. GT10, Proc. Paper 16590, Oct. 1981, pp. 1345-1359.
9. M.N. FARDIS and D. VENEZIANO, Probabilistic Analysis of Deposit Liquefaction, *Journal of the Geotechnical Engineering Division, ASCE*, Vol. 108, No. GT3, Proc. Paper 16918, March 1982, pp. 395-417.
10. M.N. FARDIS and H. KHALILI, Concrete Encased in Fiberglass Reinforced-Plastic, *Journal of the American Concrete Institute*, Vol. 78, No. 6, Nov.-Dec. 1981, pp. 440-446.
11. M.N. FARDIS and C.A. CORNELL, Multistate Reliability Analysis, *Nuclear Engineering and Design*, Vol. 71 (3), August (II) 1982.
12. M.N. FARDIS and H. KHALILI, FRP-encased Concrete as Structural Material, *Magazine of Concrete Research*, Vol. 34, No. 121, Dec. 1982, pp. 191-202. Discussion: Vol. 35, No. 125, Dec. 1983, pp. 242-243.
13. M.N. FARDIS, B. ALIBE and J.L. TASSOULAS, Monotonic and Cyclic Constitutive Law for Concrete, *Journal of the Engineering Mechanics Division, ASCE*, Vol. 108, No. EM2, Proc. Paper 17871, April 1983, pp. 516-536.
14. M.N. FARDIS, A. NACAR and M.A. DELICHATSIOS, R/C Containment Safety under Hydrogen Detonation, *Journal of Structural Engineering, ASCE*, Vol. 109, No. 11, Proc. Paper 18359, Nov. 1983, pp. 2511-2527.
15. M.N. FARDIS, and A. NACAR, Static Ultimate Capacity of R/C Containment, *Journal of Structural Engineering, ASCE*, Vol. 110, No. 5, Proc. Paper 18800, May 1984, pp. 961-977.
16. M.N. FARDIS and E.S. CHEN, A Cyclic Multiaxial Model for Concrete, *Computational Mechanics*, V. 1, 1986, pp. 301-315.
17. M.N. FARDIS, A-M. O. SKOUTEROPOULOU and S.N. BOUSIAS, Stiffness Matrix of Free-standing Helical Stairs, *Journal of Structural Engineering, ASCE*, V. 113, No. 1, Paper No. 21166, Jan. 1987, pp. 74-87.
18. A-M.O. SKOUTEROPOULOU, S.N. BOUSIAS and M.N. FARDIS, Stiffness of Free-standing Stairs with 180° Turn, *Journal of Structural Engineering, ASCE*, V. 113, No. 12, Paper No. 22042, Dec. 1987, pp. 2415-2438.
19. V.G. PAPADAKIS, C.G. VAYENAS and M.N. FARDIS, A Reaction Engineering Approach to the Problem of Concrete Carbonation, *Journal of American Institute of Chemical Engineering*, V. 35, No. 10, Oct. 1989, pp. 1639-1650.
20. V.G. PAPADAKIS, C.G. VAYENAS and M.N. FARDIS, Fundamental Modeling and Experimental Investigation of Concrete Carbonation, *American Concrete Institute Materials Journal*, V. 88, No.4, July-Aug. 1991, pp. 363-373.
21. V.G. PAPADAKIS, C.G. VAYENAS and M.N. FARDIS, Physical and Chemical Characteristics Affecting the Durability of Concrete, *American Concrete Institute Materials Journal*, V.88, No.2, March-April 1991 pp. 186-196.
22. V.G. PAPADAKIS, C.G. VAYENAS and M.N. FARDIS, Experimental Investigation and Mathematical Modeling of the Concrete Carbonation Problem, *Chemical Engineering Science*, Vol. 46, No 5/6, 1991,

- pp. 1333-1338.
23. M.G. SFAKIANAKIS and M.N. FARDIS, Bounding Surface Model for Cyclic Biaxial Bending of RC Sections, *Journal of Engineering Mechanics*, ASCE, Vol. 117, No.12, December 1991, pp. 2748-2769.
  24. M.G. SFAKIANAKIS and M.N. FARDIS, Nonlinear Finite Element for Modeling Reinforced Concrete Columns in Three-dimensional Analysis, *Computers and Structures*, Vol. 40, No. 6, 1991, pp. 1405-1419.
  25. M.G. SFAKIANAKIS and M.N. FARDIS, RC Column Model for Inelastic Seismic Response Analysis in 3D, *Journal of Engineering Mechanics*, ASCE, Vol. 117, No.12, December 1991, 2770-2787.
  26. V.G. PAPADAKIS, M.N. FARDIS and C.G. VAYENAS, Hydration and Carbonation of Pozzolanic Cements, *American Concrete Institute Materials Journal*, V. 89, No.2, March-April 1992, 119-130.
  27. V.G. PAPADAKIS, M.N. FARDIS and C.G. VAYENAS, Effect of Composition, Environmental Factors and Lime/Cement Mortar Coating, on Concrete Carbonation, *Materials and Structures*, Vol. 25, 1992, 293-304.
  28. F. KARANTONI, and M.N. FARDIS, Computed vs Observed Seismic Response and Damage of Masonry Buildings, *Journal of Structural Engineering*, ASCE, Vol.118, No.7, July 1992, 1804-1821.
  29. F. KARANTONI, and M.N. FARDIS, Effectiveness of Seismic Strengthening Techniques of Masonry Buildings, *Journal of Structural Engineering*, ASCE, Vol.118, No.7, July 1992, 1884-1902.
  30. S.N. ECONOMOU and M.N. FARDIS, Uniform Reliability Safety Format Seismic Design of Reinforced Concrete Structure, *Earthquake Engineering and Structural Dynamics*, Vol. 23, No.4, April 1994, 413-431.
  31. S.N. BOUSIAS, G. VERZELETTI, M.N. FARDIS and E. GUTIERREZ, Load-path Effects on Column Biaxial Bending with Axial Force, *Engineering Mechanics Journal*, ASCE, Vol.118, No.5, May 1995, 596-605.
  32. V.G. PAPADAKIS, M.N. FARDIS and C.G. VAYENAS, Physicochemical Processes and Mathematical Modelling of Concrete Chlorination, *Chemical Engineering Science*, Vol.51, No.4, 1996, pp. 505-513.
  33. M.N. FARDIS and T.B. PANAGIOTAKOS, Seismic Design and Response of Bare and Infilled Reinforced Concrete Buildings. Part I: Bare Structures, *Journal of Earthquake Engineering*, Imperial College Press, Vol.1, No. 1, Jan. 1997, 219-256.
  34. M.N. FARDIS and T.B. PANAGIOTAKOS, Seismic Design and Response of Bare and Infilled Reinforced Concrete Buildings. Part II: Infilled Structures, *Journal of Earthquake Engineering*, Imperial College Press, Vol.1, No. 3, 1997, 473-503.
  35. M.N. FARDIS, Seismic analysis of RC structures, *Progress in Structural Engineering and Materials*, Vol.1, No.1, 1997, 1-10.
  36. T.C. TRIANTAFILLOU and M.N. FARDIS, Strengthening of Historic Masonry Structures with Composite Materials, *Materials and Structures*, Vol. 30, Oct. 1997, 486-496.
  37. T.B. PANAGIOTAKOS and M.N. FARDIS, Effect of Column Capacity Design on Earthquake Response of Reinforced Concrete Buildings, *Journal of Earthquake Engineering*, Vol.2, No 1, 1998, 113-145.
  38. M.N. FARDIS, S.N. BOUSIAS, G. FRANCHIONI and T.B. PANAGIOTAKOS, Seismic Response and Design of RC Structures with Plan-eccentric Masonry Infills, *Journal of Earthquake Engineering and Structural Dynamics*, Vol.28, May 1999, 173-191.
  39. M.N. FARDIS, P. NEGRO, S.N. BOUSIAS and A. COLOMBO, Seismic Design of Open-story Infilled RC Buildings, *Journal of Earthquake Engineering*, Imperial College Press, Vol.3, No.1, 1999, 173-198.
  40. T.B. PANAGIOTAKOS and M.N. FARDIS, Estimation of Inelastic Deformation Demands in Multistory RC Buildings, *Journal of Earthquake Engineering and Structural Dynamics*, Vol. 28, Feb. 1999, 501-528.
  41. T.B. PANAGIOTAKOS and M.N. FARDIS, Deformation-Controlled Earthquake Resistant Design of RC Buildings, *Journal of Earthquake Engineering*, Vol. 3, No.4, 1999, 495-518.
  42. T.B. PANAGIOTAKOS and M.N. FARDIS, A Displacement-based Seismic Design Procedure of RC Buildings and Comparison with EC8, *Journal of Earthquake Engineering and Structural Dynamics*, Vol. 30, 2001, 1439-1462.
  43. T.B. PANAGIOTAKOS and M.N. FARDIS, Deformations of Reinforced Concrete Members at Yielding and Ultimate, *ACI Structural Journal*, Vol. 98, No.2, March-April 2001, 135-148.
  44. S.N. BOUSIAS, T.B. PANAGIOTAKOS and M.N. FARDIS, Modelling of RC Members Under Cyclic

- Biaxial Flexure and Axial Force, *Journal of Earthquake Engineering*, Vol. 6, No. 2, April 2002, 213-238.
45. S.N.BOUSIAS, T.C. TRIANTAFILLOU, M.N.FARDIS, L.-A.SPATHEIS, B.O'REGAN, FRP Retrofitting of Rectangular RC Columns with or without Corrosion. *ACI Structural Journal*, Vol. 101, No. 4, July-August 2004, 512-520.
  46. D.E. BISKINIS, G.K. ROUPAKIAS and M.N. FARDIS, Degradation of Shear Strength of RC Members with Inelastic Cyclic Displacements, *ACI Structural Journal*, Vol. 101, No. 6, Nov.-Dec. 2004, pp.773-783.
  47. T.B. PANAGIOTAKOS and M.N. FARDIS, Seismic Performance of RC Frames designed to Eurocode 8 or to the Greek Codes 2000, *Bulletin of Earthquake Engineering*, Vol. 2, No.2, 2004, 221-259.
  48. S.N.BOUSIAS, L.-A. SPATHEIS and M.N.FARDIS, Concrete or FRP Jacketing of Columns with Lap Splices for Seismic Rehabilitation, *Advanced Concrete Technology*, Japan Concrete Institute, Vol. 4 No.3, pp. 431-444, October 2006.
  49. S.N.BOUSIAS, L.-A. SPATHEIS and M.N.FARDIS, Seismic Retrofitting of Columns with Lap-Spliced Smooth Bars through FRP or Concrete Jackets, *Earthquake Engineering*, 2007, Vol. 11, No 5, pp. 653-674.
  50. S.N.BOUSIAS, D.E. BISKINIS, M.N.FARDIS and L.-A. SPATHEIS, Strength, Stiffness and Cyclic Deformation Capacity of Concrete Jacketed Members, *ACI Structural Journal*, 2007, Vol. 104, no. 5, pp. 521-531.
  51. S.N.BOUSIAS, M.N.FARDIS, L.-A. SPATHEIS and A. KOSMOPOULOS Pseudodynamic Response of Torsionally Unbalanced 2-Story Test Structure, *Earthquake Engineering and Structural Dynamics*, Vol. 36, No. 8, 2007, 1065-1088.
  52. A. KOSMOPOULOS and M.N.FARDIS, Estimation of Inelastic Seismic Deformations in Asymmetric Multistory RC Buildings, *Earthquake Engineering and Structural Dynamics*, Vol. 36, No. 9, 2007, 1209-1234.
  53. D.E. BISKINIS and M.N. FARDIS, Effect of Lap Splices on Flexural Resistance and Cyclic Deformation Capacity of RC Members, *Beton- und Stahlbetonbau, Sonderheft Englisch*, 102, 2007.
  54. A. KOSMOPOULOS and M.N.FARDIS, Simple Models for Inelastic Seismic Analysis of Asymmetric Multistory Buildings, *Journal of Earthquake Engineering*, Vol. 12, No. 5, July 2008, 704-727.
  55. D.E. BISKINIS and M.N. FARDIS, Deformations at Flexural Yielding of Members with Continuous or Lap-Spliced Bars, *Structural Concrete*, Vol. 11, No. 3, September 2010, 127-138.
  56. D.E. BISKINIS and M.N. FARDIS, Flexure-Controlled Ultimate Deformations of Members with Continuous or Lap-Spliced Bars, *Structural Concrete*, Vol. 11, No. 2, June 2010, 93-108.
  57. M.N. FARDIS, Modelling of Concrete Buildings for Practical Nonlinear Seismic Response Analysis, *ACEE (Architecture Civil Engineering Environment) Journal*, Vol. 3, No. 1, March 2010.
  58. V.G. BARDAKIS and M.N. FARDIS, A Displacement-Based Seismic Design Procedure for Concrete Bridges having Deck Integral with the Piers, *Bulletin of Earthquake Engineering*, Vol. 9, 2, 2011, 537-560
  59. V.G. BARDAKIS and M.N. FARDIS, Nonlinear Dynamic v Elastic Analysis for Seismic Deformation Demands in Concrete Bridges having Deck Integral with the Piers, *Bulletin of Earthquake Engineering*, Vol. 9, 2, 2011, 519-536.
  60. M.N. FARDIS, A. PAPAILIA and G. TSIONIS, Seismic fragility of RC framed and wall-frame buildings designed to the EN-Eurocodes, *Bulletin of Earthquake Engineering*, Vol. 10, 6, 2012, 1767-1793.
  61. M.N. FARDIS and G. TSIONIS, Eigenvalues and modes of distributed-mass symmetric multspan bridges with restrained ends for seismic response analysis, *Engineering Structures*, 2013, 51, 141-149.
  62. M.N. FARDIS, Performance- and displacement-based seismic design and assessment of concrete structures in the Model Code 2010. *Structural Concrete*, Vol. 14, No. 3, 2013, 215-229, DOI 10.1002/suco.201300001.
  63. D.E. BISKINIS and M.N. FARDIS, Stiffness and Cyclic Deformation Capacity of Circular RC Columns with or without Lap-Splices and FRP Wrapping, *Bulletin of Earthquake Engineering*, Vol. 11, No. 5, Oct. 2013, 1447-1466.

64. M.N. FARDIS, A. SCHETAKIS and E. STREPELIAS, RC buildings retrofitted by converting frame bays into RC walls, *Bulletin of Earthquake Engineering*, Vol. 11, 2013, No. 5, 1541-1561.
65. E. STREPELIAS, X. PALIOS, S.N. BOUSIAS and M.N. FARDIS, Experimental investigation of concrete frames infilled with RC for seismic rehabilitation, *Journal of Structural Engineering*, ASCE, 2013, Vol. 139..
66. D.E. BISKINIS and M.N. FARDIS, Models for FRP-wrapped rectangular RC columns with continuous or lap-spliced bars under cyclic lateral loading, *Engineering Structures*, 2013, Vol. 57, Dec. 2013, pp.199–212.
67. F. KARANTONI, G. TSIONIS, F. LYRANTZAKI and M.N. FARDIS, Seismic fragility of regular masonry buildings for in-plane and out-of-plane failure, *Earthquakes and Structures*, Vol. 6 (6) 2014 pp.:689-713.
68. K. ANTONIOU, G. TSIONIS and M.N. FARDIS, Inelastic shears in ductile RC walls of mid-rise wall-frame buildings and comparison to Eurocode 8, *Bulletin of Earthquake Engineering* March 2015, Vol. 13(3), pp 841-869.
69. E. LIOSSATOU and M.N. FARDIS, Residual displacements of RC Structures as SDOF Systems. *Earthquake Engineering and Structural Dynamics*, April 2015, Vol. 44(4), pp.713-734
70. M.N. FARDIS, E. LIOSSATOU and A.J. KOSMOPOULOS, Analysis of First Building Retrofitted to EN-Eurocode 8 vs. Performance under Near-Design-Level Earthquake, *Bulletin of Earthquake Engineering*. Vol. 13(9), September 2015, pp 2567-2590
71. S. GRAMMATIKOU, D.E. BISKINIS and M.N. FARDIS, Strength, Deformation Capacity and Failure Mode of RC Walls under Cyclic Loading, *Bulletin of Earthquake Engineering*. Vol. 13(11), November 2015, pp 3277-3300
72. M.N. FARDIS and D.E. BISKINIS, Transnational Access to European Seismic Research Facilities, *Structures and Buildings*, Vol. 168(11), November 2015, pp 775-787 - Themed issue on seismic testing of timber buildings.
73. M.N. FARDIS, Uplift of deck or footings in bridges with distributed mass subjected to transverse earthquake, *Earthquake Engineering and Structural Dynamics*, Vol. 44(15), 2015, pp. 2755-2773
74. D.E. BISKINIS, M.N. FARDIS and A. ANDRIOPOULOS-PSAROS, Strength, stiffness and cyclic deformation capacity of RC frames converted into walls by infilling with RC. *Bulletin of Earthquake Engineering*, Vol. 14(3), 2016, pp. 769-803.
75. S. GRAMMATIKOU, D.E. BISKINIS and M.N. FARDIS, Ultimate strain criteria for RC members in monotonic or cyclic flexure. *Journal of Structural Engineering*, ASCE, Vol. 142(9), 04016046, Sept. 2016.
76. E. LIOSSATOU and M.N. FARDIS, Near-fault effects on residual displacements of RC structures. *Earthquake Engineering and Structural Dynamics*, Vol. 45(9), July 2016, p.1391-1409.
77. X. PALIOS, M.N. FARDIS, E. STREPELIAS, S.N. BOUSIAS. Unbonded brickwork for the protection of infills from seismic damage. *Engineering Structures*, Vol. 131, Jan. 2017, p.614-624.
78. N. STATHAS, S. SKAFIDA, S.N. BOUSIAS, M.N. FARDIS, S. DIGENIS, X. PALIOS Hybrid simulation of bridge pier uplifting. *Bulletin of Earthquake Engineering*, Vol. 15(8), Aug. 2017, p. 3385-3398.
79. N. STATHAS, X. PALIOS, E. STREPELIAS, M.N. FARDIS, S.N. BOUSIAS, A. SARKIS Dry-jointed precast concrete frame on rocking or fixed footings under cyclic lateral loading, *Bulletin of Earthquake Engineering*, Vol. 15(11), Nov. 2017, p. 4915-4938.
80. S. GRAMMATIKOU, M.N. FARDIS and D.E. BISKINIS Models for the flexure-controlled strength, stiffness and cyclic deformation capacity of concrete columns with smooth bars, including lap-splicing and FRP jackets. *Bulletin of Earthquake Engineering*, Vol. 16, Issue 1, Jan. 2018, p.341-375.
81. N. STATHAS, S.N. BOUSIAS, X. PALIOS, E. STREPELIAS, M.N. FARDIS. Continuous one-way RC slabs with sinking outer support: Tests and simple model. *Journal of Structural Engineering*, ASCE, Vol. 144(2), Feb. 2018, paper 04017194.
82. N. STATHAS, S.N. BOUSIAS, X. PALIOS, E. STREPELIAS, M.N. FARDIS. Tests and simple model of RC frame subassemblies for postulated loss of column. *Journal of Structural Engineering*, ASCE, Vol. 144(2), Feb. 2018, paper 04017195.

83. S. GRAMMATIKOU, D.E. BISKINIS and M.N. FARDIS Flexural rotation capacity models fitted to test results using different statistical approaches. *Structural Concrete*, Vol. 19(2), April 2018, 608-624.
84. S. GRAMMATIKOU, D.E. BISKINIS and M.N. FARDIS Effects of load cycling, FRP jackets and lap-splicing of longitudinal bars on effective stiffness and ultimate deformation of flexure-controlled RC members. *Journal of Structural Engineering, ASCE*, Vol. 144(6), June 2018, paper 04017195.
85. M.N. FARDIS and L. AZDEJKOVIC Decompression events during transverse seismic response of symmetric three-pier bridges with distributed mass. *Journal of Structural Engineering, ASCE*, Vol. 144(9), Sept. 2018, paper 04018141.
86. M.N. FARDIS Capacity Design: Early history. *Earthquake Engineering and Structural Dynamics*, Vol. 47(14), Nov. 2018. p. 2887-2896.
87. S. GRAMMATIKOU, M.N. FARDIS and D.E. BISKINIS Energy dissipation models for RC members and structures. *Earthquake Engineering and Structural Dynamics*, Vol. 48(3), March 2019. p. 287-305.
88. N. STATHAS, I. KARAKASIS, E. STREPELIAS, X. PALIOS, S. BOUSIAS and M.N. FARDIS Tests and analysis of RC building, with or without masonry infills, for instant column loss. *Engineering Structures* Vol. 193, 2019, 57-67.
89. D.E. BISKINIS and M.N. FARDIS Cyclic shear resistance for seismic design, based on monotonic shear models in fib Model Code 2010 and in the 2018 draft of Eurocode 2. *Structural Concrete*, Vol. 21(1), Feb. 2020, 129-150.
90. D.E. BISKINIS and M.N. FARDIS Cyclic shear resistance model for Eurocode 8 consistent with the second-generation Eurocode 2. *Bulletin of Earthquake Engineering*, Vol. 18(6), Apr. 2020, p. 2891-2915.
91. X. PALIOS, E. STREPELIAS, N. STATHAS, M.N. FARDIS, S. BOUSIAS, C.Z. CHRYSOSTOMOU and N. KYRIAKIDES Three-story, two-bay concrete frames with plain bars under cyclic lateral loading *Bulletin of Earthquake Engineering*, Vol. 18(13), Oct. 2020, p. 5859 - 5884
92. M.N. FARDIS A Levels-of-Approximation approach to seismic design or assessment of beam-column joints in shear. *Structural Concrete*, Vol. 22(3), June 2021, p. 1259-1284.
93. M.N. FARDIS Shear strength model for RC joints, consistent with the shear design rules for prismatic members in the second-generation Eurocodes. *Bulletin of Earthquake Engineering*, Vol. 19(2), Febr. 2021, p. 889-917.
94. M.N. FARDIS Multispan bridges with distributed deck and pier mass and pier-flexure-deck-torsion coupling under transverse excitation - Analytical solution, parametric studies, design implications. *Earthquake Engineering and Structural Dynamics*. Vol. 50(14) Dec. 2021. p.3713-3740.
95. M.N. FARDIS Flat slabs as primary seismic elements in second-generation Eurocode 8. *Bulletin of Earthquake Engineering* (in press), 2022.
96. S. GRAMMATIKOU, M.N. FARDIS and D.E. BISKINIS Energy dissipation in reinforced concrete members before and after yielding. *Earthquake Engineering and Structural Dynamics*, (On line, Jan. 2022). DOI: 10.1002/eqe.3600.

#### **Invited Keynote papers in Refereed International Conferences**

1. M.N. FARDIS, Lessons Learned in Past Earthquakes, Invited State-of-the-Art Lecture, 10th European Conference on Earthquake Engineering, (G. Duda, ed.), Balkema, Rotterdam, Vienna, Aug. 1994, pp. 779-788.
2. M.N. FARDIS, Current Trends in European Earthquake Resistant Analysis and Design of Reinforced Concrete, Invited Keynote Lecture, 3rd Turkish National Earthquake Engineering Conference, Istanbul, March 1995.
3. M.N. FARDIS and T.B. PANAGIOTAKOS, Earthquake Response of Reinforced Concrete Structures, Invited Keynote Lecture, 5th SECED Conference on European Seismic Design Practice-Research and Applications, Chester, U.K., Oct. 1995, (A. Elnashai, ed.), Balkema, Rotterdam, pp. 11-18.
4. M.N. FARDIS, Engineering Aspects of the Mt. Parnes (GR) Earthquake of 7/9/99, Invited lecture, Italian National Earthquake Engineering Conference, Torino, Sept. 1999.
5. M.N. FARDIS, Eurocode 8: Its Conversion to a European Norm within the Framework of Current Developments Worldwide, Invited lecture, Italian National Earthquake Engineering Conference, Torino,

Sept. 1999.

6. M.N. FARDIS, Seismic Assessment and Retrofit of RC Structures, Invited State-of-the-Art Lecture, Proceedings 11th European Conference on Earthquake Engineering, Paris, Sept. 1998.
7. M.N. FARDIS, "Eurocode 8: Design of Structures for Earthquake Resistance", (invited lecture), Proceedings Earthquake Risk Minimization Conference, Nicosia, March 2002.
8. M.N. FARDIS, Code Developments in Earthquake Engineering, (Invited keynote lecture), Proceedings 12<sup>th</sup> European Conference on Earthquake Engineering, Paper No. 297, London, Sept. 2002.
9. M.N. FARDIS, European Developments in Codified Seismic Design of Concrete Structures, (Keynote paper K-20), Proceedings of 1<sup>st</sup> *fib* Congress, Osaka, Oct. 2002.
10. M.N. FARDIS, "Earthquake-Resistant Design of Concrete Buildings according to prEN1998-1 (Eurocode 8)", Keynote lecture, Portuguese Concrete Conference: BE2002, Lisbon, Nov. 2002.
11. M.N. FARDIS, "Seismic Assessment and Retrofitting of Existing Buildings According to Eurocode 8", Keynote lecture, 5<sup>th</sup> Turkish Earthquake Engineering Conference, Istanbul, May 2003.
12. M.N. FARDIS, The European Code for Seismic Design and Rehabilitation: Eurocode 8. Invited Lecture, 1<sup>st</sup> International Saudi Building Code Conference, Riyadh, Dec. 2005.
13. M.N. FARDIS and A. KOSMOPOULOS, Practical Implementation of Seismic Assessment Method in Eurocode 8 - Part 3, with Linear or Nonlinear Analysis and Deformation-based Verification using Empirical Chord Rotation Capacity Expressions, Keynote lecture, 6<sup>th</sup> Turkish Earthquake Engineering Conference, Istanbul, Oct. 2007.
14. M.N. FARDIS, Eurocode 8 and the Outlook for its Application as the 1<sup>st</sup> European Standard for Earthquake-Resistant Design, Keynote speech, 8<sup>th</sup> Pacific Conference on Earthquake Engineering, Singapore, Dec. 2007.
15. M.N. FARDIS, Modelling of Concrete Buildings for Practical Nonlinear Seismic Response Analysis, Keynote Lecture, 6<sup>th</sup> International Conference on Analytical Models and New Concepts in Concrete and Masonry Structures (AMCM2008), Lodz, June 2008.
16. M.N. FARDIS, Performance- and Displacement-Based Seismic Design of Concrete Structures, Invited lecture, The Second Kwang-Hua World Forum on Performance-based Design Theory and Code Development for Civil and Structural Engineering, Tongji University, Shanghai, Oct. 2009.
17. M.N. FARDIS, Seismic Engineering Research Infrastructures for European Synergies (SERIES), Invited lecture, The Fourth Kwang-Hua World Forum, Tongji University, Shanghai, Dec. 2011.
18. M.N. FARDIS, Performance-and displacement-based seismic design of concrete structures, Keynote Lecture, 7<sup>th</sup> International Conference on Analytical Models and New Concepts in Concrete and Masonry Structures (AMCM2011), Krakow, June 2011.
19. M.N. FARDIS, "Eurocode 8 as the 1st European Standard for Earthquake-Resistant Design and Prospects for Future" Keynote speech, Symposium "Seismic Design Codes: Past, Present and Future", Mexican Society in Earthquake Engineering. Puebla, Mexico, June 2012.
20. M.N. FARDIS, Performance-and displacement-based seismic design of concrete structures in *fib* Model Code 2010, Keynote Lecture, ACE (Advances in Civil Engineering) 2012 Conference, Ankara, Oct. 2012.
21. M.N. FARDIS, The European approach to seismic engineering and codification for concrete structures, Closing Keynote Lecture, *fib* Symposium "Engineering a Concrete Future: Technology, Modelling & Construction", Tel Aviv, April 2013.
22. E.C. CARVALHO, M.N. FARDIS, EN 1998-2: Bridges, in "Harmonization of the European normative base of construction design - Training Course on Eurocode 8", Moscow, May 2013
23. M.N. FARDIS, Seismic design and assessment of concrete structures in the *fib* Model Code 2010, Keynote Lecture, 15<sup>th</sup> Symposium of Macedonian Association of Structural Engineers (15MACE), Ohrid, Sept. 2013.
24. M.N. FARDIS, European seismic design codes for concrete structures: Past, present and future. Keynote Lecture, 2<sup>nd</sup> Turkish Conference on Earthquake Engineering & Seismology (TDMSK-2013), Antakya, Sept. 2013.
25. M.N. FARDIS, D. BISKINIS and S. GRAMMATIKOU, RC members in cyclic loading: Strength, deformation capacity, failure modes, 8<sup>th</sup> International Conference on Analytical Models and New

Concepts in Concrete and Masonry Structures (AMCM2014), Wroclaw, June 2014.

26. M.N. FARDIS, From performance- and displacement-based assessment of existing buildings per EN1998-3 to design of new concrete structures in *fib* MC2010, 2nd European Conference on Earthquake Engineering and Seismology, Istanbul, Aug. 2014
27. M.N. FARDIS, Experience from the use of the European Standard EN 1998-3 for seismic assessment and retrofitting - Prospects for the future. SMAR 2015. Keynote Lecture, 3rd Conference on Smart Monitoring, Assessment and Rehabilitation of Civil Structures, Antalya, Sept. 2015.
28. M.N. FARDIS, Multihazard design of concrete buildings. 1st International Conference on Natural hazards and infrastructure - Protection, design, rehabilitation, Chania, June 2016.
29. M.N. FARDIS, Holistic design of concrete structures for resilience to blast, impact, fire and earthquake. 1st International Workshop on Resilience, Torino, Sept. 2016.
30. M.N. FARDIS, Multihazard design of concrete structures for earthquake, blast, impact or fire. 20th National Congress of the Mexican Society of Structural Engineering, Merida, Nov. 2016.
31. M.N. FARDIS, Design models for strength, stiffness and cyclic deformation capacity of RC members retrofitted with FRP. Invited Presentation, Mini-symposium "Seismic Retrofit of RC Structures with FRP Composites", 8th International Conference on Fibre-Reinforced Polymer Composites in Civil Engineering (CICE 2016), Hong Kong, Dec. 2016.
32. M.N. FARDIS, From ductility-based seismic design of concrete structures to design for resilience to multiple hazards, Invited Presentation, The Seventh Kwang-Hua World Forum, Tongji University, Shanghai, Dec. 2016.
33. M.N. FARDIS, Synergies and conflicts between seismic design and design for other extreme actions. Keynote speech, International Symposium in Earthquake Engineering and Structural Dynamics, Reykjavik, June 2017
34. M.N. FARDIS, Impact of experimental research on the Eurocode 8 provisions for RC structures. Keynote Lecture, 7th International Conference on Advances in Experimental Structural Engineering, (7AESE) Pavia, Sept. 2017.
35. M.N. FARDIS, From Force-based to Displacement-based seismic design of RC structures and beyond (Keynote lecture) 16<sup>th</sup> European Conference on Earthquake Engineering, Thessaloniki, June 2018.
36. M.N. FARDIS, Energy dissipation in concrete structures under earthquake shaking, Invited Presentation, The Eighth Kwang-Hua World Forum, Tongji University, Shanghai, Dec. 2018.
37. M.N. FARDIS, Practical, rules-based seismic assessment of concrete buildings through nonlinear response-history analysis. Invited Plenary Lecture, COMPDYN 2019, Heraklion, Crete, June 2019.

#### **Invited contributions to international Workshops and Volumes honoring distinguished professors**

1. M.N. FARDIS, Computational Model of Inelastic Behaviour of RC Members in Cyclic Shear. In Proceedings Volume Honoring Prof. T.P. Tassios, National Technical University of Athens Editions, Athens, 1992, pp. 141-159.
2. M.N. FARDIS, Current Developments and Prospects for Eurocode 8, Proceedings Prof. G. Penelis International Symposium on Concrete and Masonry Structures, pp.35-46, Thessaloniki, October 2000.
3. D. BISKINIS, G. ROUPAKIAS and M.N. FARDIS, "Stiffness and Cyclic Deformation Capacity of Circular Concrete Columns", in: "Befestigungstechnik Bewehrungstechnik und ...Festschrift zu Ehren von Prof. Dr.-Ing. Rolf Eligehausen anlaesslich seines 60. Geburtstages" (W. Fuchs, H.-W. Reinhardt, eds.), Aktuelle Beitrage aus Forschung und Praxis, Ibidem-Verlag, ISBN: 3-89821-208-4, Stuttgart 2002, pp. 321-330.
4. M.N. FARDIS and D. BISKINIS, Deformation Capacity of RC Members, as Controlled by Flexure or Shear. In Proceedings of International Symposium on Performance-based Engineering for Earthquake Resistant Structures honoring Prof. Shunsuke Otani University of Tokyo, Sept. 2003, pp. 511-530.
5. M.N. FARDIS, A Proposal for Performance- and Displacement-based Seismic Design of Concrete Structures. In Proceedings of Workshop in honor of Prof. Ezio Faccioli, Politecnico di Milano, Feb. 2011, pp. 10-14
6. E. LIOSSATOU and M.N. FARDIS, Residual seismic displacements of RC oscillators. In Proceedings of Workshop: Earthquake Engineering and Engineering Seismology: Past Achievements and Future

- Prospects, honoring Prof. Polat Gulkan, Middle East Technical University, Ankara, Oct. 2011, pp. 156-176
7. M.N. FARDIS. Seismic response analysis of distributed-parameter multi-span bridges with restrained ends, in "Issues on Mechanical and Civil Engineering" Volume to honour Prof. Enrique Alarcon (M. Doblare et al, eds). UPM Press, Madrid, ISBN 978-84-939196-7-2, 2012, pp. 347-360.
  8. M.N. FARDIS. Member models for practical seismic evaluation and rehabilitation of concrete buildings using nonlinear response history analysis. Symposium honoring Prof. Anil Chopra on his retirement. University of California, Berkeley, Ca, Oct. 2017.
  9. M.N. FARDIS. Hysteretic energy dissipation in seismic response analysis of concrete structures. First Colloquium of the Spanish Theoretical and Applied Mechanics Society (STAMS 2019), honoring Profs. Enrique Alarcon and Amable Liñán. Madrid, March 2019.
  10. M.N. FARDIS, D.E. BISKINIS and S. GRAMMATIKOU Modeling of the seismic response of concrete buildings with smooth bars. In "Recent Global Advances in Earthquake Engineering" Proceedings of symposium honoring Prof. Haluk Sucuoglu on his retirement from Middle East Technical University, Oct. 2019, p. 134-163
  11. M.N. FARDIS. Practical, rules-based seismic assessment of concrete buildings, using nonlinear response-history analysis. Symposium honoring Prof. Gustavo Ayala on his 50 years at Universita Autonoma Nacional de Mexico, Mexico City, Nov. 2019

#### **Papers in Refereed International Conferences**

1. M.N. FARDIS, C.A. CORNELL, and J.E. MEYER, A Probabilistic Seismic Analysis of Containment Liner Integrity, Trans. of the 4th International Conference on Structural Mechanics in Reactor Technology, Vol. K(a) Paper 4/16, San Fransisco, Ca., August 1977.
2. M.N. FARDIS, and O. BUYUKOZTURK, Finite Element Model for Shear Transfer in Reinforced Concrete, ASCE Spring Convention, Boston, Mass., April 1979.
3. M.N. FARDIS, B. ALIBE, and J.L. TASSOULAS, Monotonic and Cyclic Model of Concrete Behavior, Joint ASME-ASCE Mechanics Conference, Boulder, Co., June 1981.
4. M.N. FARDIS, Concrete Encased in Fiber-Reinforced Plastic, as Structural Material, ACI Fall Convention, Session on Research on Plain and Reinforced Concrete, Quebec City, Quebec, Sept. 1981.
5. M.N. FARDIS, Multistate Reliability Analysis and Application to Seismic Safety, Proceedings of the 3rd Post-SMiRT International Seminar on Reliability of Nuclear Power Plants, Paris, France, August 1981, pp. 61-69. (Invited panelist).
6. M.N. FARDIS, and A. NACAR, Response of Reinforced Concrete Containment to Hydrogen Detonation Loading, Proceedings of RILEM-CEB-IASBE-IASS Symposium on Concrete Structures under Impact and Impulsive Loadings, West Berlin, June 1982, pp. 607-622.
7. M.N. FARDIS, and S.S. LIU, Analysis of Reinforced Concrete Beam-Column Joints under Seismic Loading, Proceedings of the 7th European Conference on Earthquake Engineering, Vol. 4, Athens, Sept. 1982, pp. 135-142.
8. E.-S. CHEN, and M.N. FARDIS, Cyclic Multiaxial Model of Plain Concrete, Transactions of the 7th International Conference on Structural Mechanics in Reactor Technology, Chicago, Ill., Aug. 1983.
9. M.N. FARDIS, and A. NACAR, Effect of Natural Veriability of Reinforcement on Static Ultimate Capacity of R/C Containment, Transactions of the 7th International Conference on Structural Mechanics in Reactor Technology, Chicago, Ill., Aug. 1983.
10. A-M. O. SKOUTEROPOULOU, S.N. BOUSIAS, and M.N. FARDIS, Contribution of Curved-in-space Free-standing Staircases to the Lateral Stiffness of Structures, Proc. of the 8th European Conference on Earthquake Engineering, Lisbon, Sept. 1986, Vol. 3, pp. 6.6/41-48.
11. F. KARANTONI and M.N. FARDIS, Assessment of Analysis Methods and of Strengthening Techniques, for Earthquake Resistant Masonry Structures, Proc. of the International Conference on Structural Conservation of Stone Masonry (Diagnosis, Repair and Strengthening), Athens, Oct. 1989.
12. M.G. SFAKIANAKIS and M.N. FARDIS, Biaxial Column Element for Nonlinear Dynamic Analysis of Space-frame Reinforced Concrete Structures, in Proceedings of the European Conference on Structural Dynamics, EURO DYN '90, Bochum, June 1990, Kraetzig et al (eds.), Balkema, Rotterdam, pp. 557-564.
13. M.G. SFAKIANAKIS, M.N. FARDIS and S.E. DRITSOS, Analysis of the Response of Reinforced

- Concrete Buildings to the 1986 Kalamata Earthquake using Alternative Methods and Comparisons with the Observed Damage, Proc. 9th European Conference on Earthquake Engineering, Moscow, September 1990.
14. M.G. SFAKIANAKIS, M.N. FARDIS, Cyclic Model of Inelastic Biaxial Bending of Reinforced Concrete Columns for Nonlinear Dynamic Analyses of Structures, Proc. 9th European Conference on Earthquake Engineering, Moscow, September 1990.
  15. F. KARANTONI and M.N. FARDIS, Analytical Study of Strengthening Techniques for Earthquake Resistant Masonry Buildings, Proc. 9th European Conference on Earthquake Engineering, Moscow, September 1990, Vol. 7B, pp. 125-134.
  16. S.N. ECONOMOU and M.N. FARDIS, Seismic Hazard Analysis on Spectral Acceleration Including Statistical Uncertainty. Application to Sites in Greece, Proc. 9th European Conference on Earthquake Engineering, Moscow, September 1990.
  17. V.G. PAPADAKIS, C.G. VAYENAS and M.N. FARDIS, Fundamental Concrete Carbonation Model and Application to Durability of Reinforced Concrete, Proceedings 5th International Conference of Durability of Building Materials and Components, Brighton, U.K., November 1990, pp. 27-38.
  18. HARISIS and M.N. FARDIS, Automatic Computer-Aided Construction of Strut-and-Tie Models, IABSE Colloquium on Structural Concrete, Stuttgart, Apr. 1991, pp. 373-377.
  19. HARISIS and M.N. FARDIS, Algorithms for the Automatic Design / Detailing of Two-Dimensional RC Elements, Symposium on Computer Applications in Concrete Technology, ACI Annual Convention, Boston, Mass., March 1991.
  20. HARISIS and M.N. FARDIS, Automatic Design / Detailing of Seismic Resistant RC Buildings, Symposium on Computer Applications in Concrete Technology, ACI Annual Convention, Boston, Mass., March 1991.
  21. V.G. PAPADAKIS, M.N. FARDIS and C.G. VAYENAS, Physical and Chemical Properties Affecting the Durability of OPC and Pozzolanic Cement Concrete, ACI Annual Convention, Boston, Mass., March 1991.
  22. M.N. FARDIS and S.N. ECONOMOU, Variable Safety Factors for Seismic Design of RC, Proc. 10th World Conference on Earthquake Engineering, Madrid, July 1992, pp. 5771-5776.
  23. S.N. BOUSIAS, G. VERZELETTI, M.N. FARDIS and G. MAGONETTE, Reinforced Concrete Columns in Cyclic Biaxial Bending and Axial Load, Proc. 10th World Conference on Earthquake Engineering, Madrid, July 1992, 3041-3049.
  24. F.V. KARANTONI and M.N. FARDIS, Assessment of Intervention Techniques for Seismic Strengthening of Masonry, Proc. Intern. Cong. on Restoration of the Architectural Heritage and Building (Canarias '92), Canarias, July 1992.
  25. S.N. ECONOMOU, M.N. FARDIS and A. HARISIS, Linear Elastic v Nonlinear Dynamic Seismic Response Analysis of RC Buildings, EURO-DYN '93, 2nd European Conference on Structural Dynamics, Trondheim, June 1993, pp. 63-70.
  26. F.V. KARANTONI, M.N. FARDIS, E. VINTZELEOU and A. HARISIS, Effectiveness of Seismic Strengthening Interventions, Proc. IABSE Symposium on the Structural Preservation of the Architectural Heritage, Roma, Sept. 1993, pp. 549-556.
  27. T.C. TRIANTAFILLOU and M.N. FARDIS, Advanced Composites as Strengthening Materials of Historic Structures, Proc. IABSE Symposium on the Structural Preservation of the Architectural Heritage, Roma, Sept. 1993, pp. 541-548.
  28. BOUSIAS, S.N. and M.N. FARDIS, Inelastic R.C. Section and Member Model for General Biaxial Bending with Axial Force, Proc. EURO-C 1994, (H. Mang et al eds.), Pineridge Press, Swansea, U.K., Innsbruck, March 1994, pp. 795-804.
  29. S.N. ECONOMOU and M.N. FARDIS, Probabilistic Description and Simulation of Extreme Bidirectional Excitation in a Structure's Lifetime, 10th European Conference on Earthquake Engineering, (G. Duda, ed.), Balkema, Rotterdam, Vienna, Aug. 1994, pp. 1211-1216.
  30. M.N. FARDIS, Damage Measures and Failure Criteria for Reinforced Concrete Members, 10th European Conference on Earthquake Engineering, (G. Duda, ed.), Balkema, Rotterdam, Vienna, Aug. 1994, pp. 1377-1382.

31. E.C. CARVALHO and M.N. FARDIS, Strength versus Ductility in Seismic Design of Reinforced Concrete Buildings, Special Session on Prenormative Research in Support of Eurocode 8, 10th European Conference on Earthquake Engineering, (G. Duda, ed.), Balkema, Rotterdam, Vienna, Aug. 1994.
32. M.N. FARDIS, Eurocode 8: Reinforced Concrete, 8, Invited paper, Special Session on Eurocode 8, 10th European Conference on Earthquake Engineering, (G. Duda, ed.), Balkema, Vienna, Aug. 1994, pp. 2945-2950.
33. M.N. FARDIS and G.M. CALVI, Effects of Infills on the Global Response of Reinforced Concrete Frames, Special Session on Prenormative Research in Support of Eurocode 8, 10th European Conference on Earthquake Engineering, (G. Duda, ed.), Balkema, Rotterdam, Vienna, Aug. 1994, pp. 2893-2898.
34. F.V. KARANTONI, M.N. FARDIS and D. MATRAKA, Comparative Study of the Seismic Response of Stone and Brick Masonry Buildings, STREMA'95 Conference: Structural Studies on Repair and Maintenance of Historical Buildings, Chania, May 1995, Computational Mechanics Publications (Brescia and Leftheris, eds.), pp. 61-68.
35. T.C. TRIANTAFILLOU and M.N. FARDIS, Strengthening of Historic Masonry Structures with Fibre Reinforced Plastic Composites, STREMA'95 Conference: Structural Studies on Repair and Maintenance of Historical Buildings, Chania, May 1995, Computational Mechanics Publications (Brescia and Leftheris, eds.), pp. 129-136.
36. M.N. FARDIS, Current Trends in Earthquake Resistant Analysis and Design of Reinforced Concrete, 5th SECED Conference on European Seismic Design Practice-Research and Application, Chester, U.K., Oct. 1995, (A. Elnashai, ed.), Balkema, Rotterdam, pp. 375-382.
37. V.G. PAPADAKIS, M.N. FARDIS and C.G. VAYENAS, Effect of Fly Ash and Natural Pozzolans on the Pore Structure Characteristics and on Durability of Concrete, Intern. Conference for Chemicals and Additives for the Building and Construction Industry, Brussels, Nov. 1995.
38. V.G. PAPADAKIS, A.P. ROUMELIOTIS, M.N. FARDIS and C.G. VAYENAS, Mathematical Modelling of Chloride Effect on Concrete Durability and Protection Measures, Intern. Conference: Concrete in the Service of Mankind, Dundee, Scotland, June 1996.
39. M.N. FARDIS, G.M. CALVI and T.B. PANAGIOTAKOS, Studies for the Development of Code Provisions for Infilled RC frames, 11th World Conference on Earthquake Engineering, Acapulco, June 23-28, 1996, p. STS-6 (2051).
40. M.N. FARDIS and T.B. PANAGIOTAKOS, Hysteretic Damping of Reinforced Concrete Elements, 11th World Conference on Earthquake Engineering, Acapulco, June, 1996, p. P-5 (464).
41. T.B. PANAGIOTAKOS and M.N. FARDIS, Seismic Response of Infilled RC Frame Structures, 11th World Conference on Earthquake Engineering, Acapulco, June, 1996, p. P-4 (225).
42. E.C. CARVALHO, E. COELHO and M.N. FARDIS, Assessment of Eurocode 8 Provisions for RC Frames, 11th World Conference on Earthquake Engineering, Acapulco, June, 1996, p. STS-6 (2049).
43. T.B. PANAGIOTAKOS and M.N. FARDIS, Nonlinear Seismic Response Analyses of Infilled R/C Frame Structures, Proc. 2nd National Congress on Computational Mechanics, Chania, June 1996.
44. T.C. TRIANTAFILLOU and M.N. FARDIS, Strength-Based Optimum Design Formulation for Lightweight/High-Strength Concrete Sandwich Panels, Proceedings FIP International Conference on New Technologies in Structural Engineering, Lisbon, July 1997, Vol.1, p.153-160.
45. M.N. FARDIS, Computer-Aided Design of Earthquake Resistant Reinforced Concrete Buildings, Proceedings Worldwide ECCE Symposium on Computers in the Practice of Building and Civil Engineering, Lahti, Finland, September 1997, p. 269-273.
46. M.G. SFAKIANAKIS and M.N. FARDIS, Case Studies of Cooling Tower Assessment and Repair, Proceedings 13th FIP Congress on Challenges for Concrete in the Next Millenium, Amsterdam, May 1998, Balkema, Rotterdam, p. 665-668.
47. M.N. FARDIS, T.P. PANAGIOTAKOS and G.M. CALVI, Seismic Response and Design of Masonry-infilled Reinforced Concrete Buildings, Proceedings 1st Structural Engineers World Congress, San Francisco, July 1998.
48. M.N. FARDIS, Design of R/C Infilled Structures, Proceedings 11th European Conference on Earthquake Engineering, Paris, Sept. 1998.

49. M.N. FARDIS, S.N. BOUSIAS and T.B. PANAGIOTAKOS, Seismic Response and Design of Irregularly Infilled RC Structures, Proceedings 11th European Conference on Earthquake Engineering, Paris, Sept. 1998.
50. T.B. PANAGIOTAKOS and M.N. FARDIS, Deformation-controlled Seismic design of RC structures, Proceedings 11th European Conference on Earthquake Engineering, Paris, Sept. 1998.
51. G. MESCHKE, H.A. MANG, M.N. FARDIS and S.N. BOUSIAS, Retrofitting of a RC Cooling Tower: from Concrete Modelling to Structural Design, ASCE Structures Congress, New Orleans, LA, April, 1999.
52. M.N. FARDIS, Design Provisions for Masonry-Infilled RC Frames, Proceedings 12th World Conference on Earthquake Engineering, Auckland, NZ, Feb. 2000, paper 2553.
53. A. COLOMBO, M.N. FARDIS, J. MOLINA, P. NEGRO, T.B. PANAGIOTAKOS and G. TSIONIS, Pseudodynamic Response of Dual RC Structure with Different Designs, Proceedings 12<sup>th</sup> European Conference on Earthquake Engineering, Paper No. 297, London, Sept. 2002.
54. S.N. BOUSIAS, L.A. SPATHIS, T.C. TRIANTAFYLLOU and M.N. FARDIS, Seismic Retrofitting of Corrosion-damaged RC Columns, Proceedings 12<sup>th</sup> European Conference on Earthquake Engineering, Paper No. 431, London, Sept. 2002.
55. T.B. PANAGIOTAKOS, A.J. KOSMOPOULOS and M.N. FARDIS, Displacement-based Seismic Assessment and Retrofit of Reinforced Concrete Buildings, Proceedings of 1<sup>st</sup> *fib* Congress, Paper No.W-177, Osaka, Oct. 2002.
56. S. BOUSIAS, T. TRIANTAFILLOU, M.N. FARDIS, L. SPATHIS and B. O' REGAN, Experimental Behaviour of Deficient Rectangular Columns with Externally Bonded FRPs, Proceedings of 1<sup>st</sup> *fib* Congress, Paper No.W-189, Osaka, Oct. 2002.
57. D. BISKINIS, G. ROUPAKIAS and M.N. FARDIS, "Cyclic Deformation Capacity of Shear-Critical RC Members", Paper No. 199, Proceedings, *fib* Symposium: "Concrete Structures in Seismic Regions", Athens, May 2003.
58. T. PANAGIOTAKOS and M.N. FARDIS, "Performance of RC Frames Designed to the EN EC8 at Collapse Prevention Level", Paper No. 173, Proceedings, *fib* Symposium: "Concrete Structures in Seismic Regions", Athens, May 2003.
59. A. KOSMOPOULOS, S. BOUSIAS and M.N. FARDIS, "Design and Pre-Test Assessment of 3-Storey Torsionally-Unbalanced RC Test Structure", Paper No. 123, Proceedings, *fib* Symposium: "Concrete Structures in Seismic Regions", Athens, May 2003.
60. S.N. BOUSIAS, T.C. TRIANTAFILLOU, M.N. FARDIS, L. SPATHIS, B. O'REGAN, Strengthening of Corrosion-damaged RC Columns with FRP, Proceedings 6<sup>th</sup> International Symposium on FRP Reinforcement for Concrete Structures (FRPRCS-6), Singapore, July 2003, pp. 527-537.
61. T.B. PANAGIOTAKOS and M.N. FARDIS, Seismic Performance of RC Frame Buildings Designed to the three Ductility Classes of EN1998 (Eurocode 8) or the Greek Codes 2000, International Earthquake Engineering Conference SE-40 (Skopje Earthquake 40 years), Ohrid, F.Y.R.o.M., Aug. 2003.
62. A.I. KOSMOPOULOS and M.N. FARDIS, Seismic Testing of 3-storey Full-scale Torsionally Unbalanced RC Structure: Pre-test Predictions, Design and Analyses of Retrofitting, Proc. 5<sup>th</sup> International Ph.D Symposium in Civil Engineering, Delft, June 2004, Balkema, Rotterdam, p. 1115-1123.
63. D.E. BISKINIS and M.N. FARDIS, Cyclic Strength and Deformation Capacity of RC Members, including Members Retrofitted for Earthquake Resistance, Proc. 5<sup>th</sup> International Ph.D Symposium in Civil Engineering, Delft, June 2004, Balkema, Rotterdam, p. 1125-1133.
64. M.N. FARDIS, Current Developments and Future Prospects of the European Code for Seismic Design and Rehabilitation of Buildings: Eurocode 8, Special Theme Session: Future of Building Codes, 13<sup>th</sup> World Conference in Earthquake Engineering, Paper No. 2025, Vancouver, August 2004.
65. S.N. BOUSIAS, L.A. SPATHIS and M.N. FARDIS, Seismic Retrofitting of Columns with Lap-splices through CFRP Jackets, 13<sup>th</sup> World Conference in Earthquake Engineering, Paper No. 765, Vancouver, August 2004.
66. S.N. BOUSIAS, L.A. SPATHIS and M.N. FARDIS, Seismic Retrofitting of Columns with Lap-splices via RC Jackets, 13<sup>th</sup> World Conference in Earthquake Engineering, Paper No. 1937, Vancouver, August

- 2004.
67. F.V. KARANTONI and M.N. FARDIS, Damage to Reinforced Concrete Buildings due to the Aegion (GR) 1995 Earthquake, Proc. International Symposium on Durability and Maintenance of Concrete Structures, Dubrovnik, October 2004, pp.249-256.
  68. M.N. FARDIS, The Seismic Action in the 2004 European Code for Design and Retrofitting of Structures for Earthquake Resistance, Proc. International Symposium on Earthquake Engineering Commemorating Tenth Anniversary of the 1995 Kobe Earthquake (ISEE Kobe 2005), Kobe/Awaji, January 2005.
  69. M.N. FARDIS, D. BISKINIS, A. KOSMOPOULOS, S.N. BOUSIAS and A.-S. SPATHIS, Seismic Retrofitting Techniques for Concrete Buildings, Proc. SPEAR Workshop – An event to honour the memory of Jean Donea, Ispra, April 2005 (M.N. Fardis and P. Negro, eds.)
  70. S.N. BOUSIAS, M.N. FARDIS and D. BISKINIS, Retrofitting of RC Columns with Deficient Lap-Splices, *fib* Symposium “Keep Concrete Attractive”, Budapest, May 2005.
  71. M.A. DELICHATSIOS and M.N. FARDIS, A Reappraisal of Containment Safety under Hydrogen Detonation, Proc. International Conference on Hydrogen Safety, Paper No 120125, Pisa, Sept. 2005.
  72. S.N. BOUSIAS, L.-A. SPATHIS and M.N. FARDIS, FRP-Retrofitting and Seismic Response of Torsionally Unbalanced Two-Storey Building, 2<sup>nd</sup> *fib* Congress, Napoli, June 2006, paper 9-14.
  73. T.B. PANAGIOTAKOS, V. BARDAKIS and M.N. FARDIS, Displacement-Based Seismic Design Procedure for Concrete Bridges with Monolithic Connection Between Deck and Piers, 2<sup>nd</sup> *fib* Congress, Napoli, June 2006, paper 8-10.
  74. D. BISKINIS and M.N. FARDIS, Effective Stiffness, Lateral Resistance and Cyclic Deformation Capacity of Bridge Piers, 2<sup>nd</sup> *fib* Congress, Napoli, June 2006, paper 8-14.
  75. A. KOSMOPOULOS and M.N. FARDIS, Seismic Evaluation of Strongly Irregular and Torsionally Unbalanced Concrete Buildings, 2<sup>nd</sup> *fib* Congress, Napoli, June 2006, paper 9-34.
  76. V. BARDAKIS and M.N. FARDIS, Modelling and Inelastic Seismic Response Analysis in 3D of Concrete Bridges having Monolithic Connection between Deck and Piers, 6<sup>th</sup> PhD Symposium in Civil Engineering, Zurich, August 2006.
  77. M.N. FARDIS, The Self-Sufficiency of Eurocode 8 and the Applicability of Complementary Documents - The Situation in Greece, Paper no.311, 1<sup>st</sup> European Conference on Earthquake Engineering and Seismology (a joint event of the 13<sup>th</sup> ECEE and the 30<sup>th</sup> General Assembly of the ESC), Geneva, September 2006.
  78. M.N. FARDIS, Seismic Design Issues for Masonry-Infilled RC Frames, Paper no.313, 1<sup>st</sup> European Conference on Earthquake Engineering and Seismology (a joint event of the 13<sup>th</sup> ECEE and the 30<sup>th</sup> General Assembly of the ESC), Geneva, September 2006.
  79. D. BISKINIS and M.N. FARDIS, Assessment and Upgrading of Resistance and Deformation Capacity of RC Piers, Paper no.315, 1<sup>st</sup> European Conference on Earthquake Engineering and Seismology (a joint event of the 13<sup>th</sup> ECEE and the 30<sup>th</sup> General Assembly of the ESC), Geneva, September 2006.
  80. V. BARDAKIS and M.N. FARDIS, Linear v. Nonlinear Seismic Response Analysis of Concrete Bridges, *fib* Symposium: “Concrete Structures - Stimulators of Development”, Dubrovnik, Croatia, May 2007.
  81. S.N. BOUSIAS, A.-L. SPATHIS, M.N. FARDIS, C.G. PAPANICOLAOU and T.C. TRIANTAFILLOU, Pseudodynamic Tests of Non-Seismically Designed RC Structures Retrofitted with Textile-Reinforced Mortar, 8<sup>th</sup> International Symposium on Fiber Reinforced Polymer Reinforcement for Concrete Structures (FRPRCS-8), Patras, July 2007.
  82. S.N. BOUSIAS, A.-L. SPATHIS and M.N. FARDIS, Experimental Seismic Response of Eccentric RC Structures, before or after CFRP-Rehabilitation, 8<sup>th</sup> International Symposium on Fiber Reinforced Polymer Reinforcement for Concrete Structures (FRPRCS-8), Patras, July 2007.
  83. A. KOSMOPOULOS, S.N. BOUSIAS and M.N. FARDIS, Seismic Rehabilitation of a Theater Facility according to Eurocode 8 using CFRPs, 8<sup>th</sup> International Symposium on Fiber Reinforced Polymer Reinforcement for Concrete Structures (FRPRCS-8), Patras, July 2007.
  84. D. BISKINIS and M.N. FARDIS, Cyclic Deformation Capacity of FRP-Wrapped RC Columns or Piers, with Continuous or Lap-Spliced Bars, 8<sup>th</sup> International Symposium on Fiber Reinforced Polymer

- Reinforcement for Concrete Structures (FRPRCS-8), Patras, July 2007.
85. X. PALIOS, J. MOLINA, S. BOUSIAS, E. STREPELIAS and M.N. FARDIS, Sub-Structured Pseudodynamic Testing of Rate-Dependent Bridge Isolation Devices, 2<sup>nd</sup> International Conference on Advances in Experimental Structural Engineering, Paper No. 7120119, Tongji Univ., Shanghai, Dec. 2007.
  86. V.G. BARDAKIS and M.N. FARDIS, Displacement-Based Seismic Design of Concrete Bridges, 14<sup>th</sup> World Conference on Earthquake Engineering, Beijing, paper 05-02-0017, Oct. 2008.
  87. D.E. BISKINIS and M.N. FARDIS, Cyclic Deformation Capacity, Resistance and Effective Stiffness of RC Members with or without Retrofitting, 14<sup>th</sup> World Conference on Earthquake Engineering, Beijing, paper 05-03-0153, Oct. 2008.
  88. S.N. BOUSIAS, E. STREPELIAS, X. PALIOS, M.N. FARDIS and S. RAFTOPOULOS Experimental study of bridge seismic isolation systems with or without supplemental energy, 14<sup>th</sup> World Conference on Earthquake Engineering, Beijing, paper 12-01-0140, Oct. 2008.
  89. M.N. FARDIS, Displacement- and Performance-Based Seismic Design for Sustainable Earthquake Resistant Concrete Construction, 2nd Intern. Conference on Sustainable Construction Materials and Technologies, June 2010, Ancona, Italy
  90. S.N. BOUSIAS, M.N. FARDIS, E. STREPELIAS and X. PALIOS Cyclic Test to Failure of Pre-Damaged Retrofitted RC Building, Paper 516, 3<sup>rd</sup> *fib* International Congress, Washington DC, May 2010
  91. M.N. FARDIS, Shear resistance of RC members or joints under seismic loading, Workshop, Design of Concrete Structures Using EN1992-1-1, Prague, Sept. 2010.
  92. G. TSIONIS and M.N. FARDIS, Seismic fragility of concrete bridges with deck monolithically connected to the piers or supported on elastomeric bearings. Paper 3282, 15th World Conference on Earthquake Engineering, Lisbon, Sept. 2012.
  93. A. PAPAILIA, G. TSIONIS and M.N. FARDIS, Effects of Design to EN-Eurocodes on the Seismic Fragility of Concrete Buildings. Paper 1426, 15th World Conference on Earthquake Engineering, Lisbon, Sept. 2012.
  94. M.N. FARDIS, Seismic Engineering Research Infrastructures for European Synergies (SERIES). Paper 3001, 15th World Conference on Earthquake Engineering, Lisbon, Sept. 2012.
  95. F. KARANTONI, F. LYRANTZAKI, G. TSIONIS and M.N. FARDIS, Seismic Fragility Functions of Stone Masonry Buildings. Paper 5229, 15th World Conference on Earthquake Engineering, Lisbon, Sept. 2012.
  96. D.E. BISKINIS and M.N. FARDIS, Effective stiffness and cyclic ultimate deformation of circular RC columns including effects of lap-splicing and FRP wrapping. Paper 1128, 15th World Conference on Earthquake Engineering, Lisbon, Sept. 2012.
  97. M.N. FARDIS, A. SCHETAKIS and E. STREPELIAS, Seismic retrofitting of buildings by adding walls. *fib* Symposium: “Engineering a Concrete Future: Technology, Modeling & Construction”, Tel Aviv, April 2013.
  98. K. ANTONIOU, G. TSIONIS and M.N. FARDIS, Seismic fragility of concrete buildings, 4th *fib* Congress, Mumbai, Feb. 2014, paper no. 62.
  99. S. GRAMMATIKOU, D.E. BISKINIS and M.N. FARDIS, Strength, deformation capacity and failure mode of RC walls in cyclic loading, 4th *fib* Congress, Mumbai, Febr. 2014, paper no. 408
  100. I. PERUS, D. BISKINIS, P. FAJFAR, M.N. FARDIS, S. GRAMMATIKOU, D. LIGNOS and H. KRAWINKLER, The SERIES Database of RC elements. 2nd European Conference on Earthquake Engineering and Seismology, Istanbul, Aug. 2014
  101. G. TSIONIS and M.N. FARDIS, Seismic fragility curves for reinforced concrete buildings and bridges in Thessaloniki. 2nd European Conference on Earthquake Engineering and Seismology, Istanbul, Aug. 2014
  102. K. ANTONIOU, G. TSIONIS and M.N. FARDIS, Evaluation of Eurocode 8 rules for wall shear demands in wall-frame RC buildings, 2nd European Conference on Earthquake Engineering and Seismology, Istanbul, Aug. 2014
  103. M.N. FARDIS, The First Generation of EN-Eurocode 8: Its strengths and how it can better serve the

needs of practicing engineers, 2nd European Conference on Earthquake Engineering and Seismology, Istanbul, Aug. 2014

104. M.N. FARDIS, E. LIOSSATOU and A.J. KOSMOPOULOS First building retrofitted to EN-Eurocode 8 tested by near-design-level-earthquake. fib Symposium: “Innovation and Design”, Copenhagen, May 2015
105. D.E. BISKINIS, A. ANDRIOPOULOS-PSAROS and M.N. FARDIS, Properties of RC walls produced by infilling a frame with concrete for seismic rehabilitation. SMAR 2015. 3rd Conference on Smart Monitoring, Assessment and Rehabilitation of Civil Structures, Antalya, Sept. 2015.
106. N. STATHAS, S.N. BOUSIAS, X. PALIOS, E. STREPELIAS and M.N. FARDIS Experimental study of continuous beams and slabs under loss of support conditions, fib Symposium, Cape Town, November 2016.
107. S. GRAMMATIKOU, D.E. BISKINIS and M.N. FARDIS, Ultimate strain criteria and plastic hinge length for RC members in monotonic or cyclic flexure. 16th World Conference on Earthquake Engineering, Santiago, Chile, January 2017.
108. N. STATHAS, I. KARAKASIS, E. STREPELIAS, X. PALIOS, M.N. FARDIS and S. BOUSIAS Masonry infilling of RC building against progressive collapse in case of loss of column. 7th International Conference on Advances in Experimental Structural Engineering, (7AESE) Pavia, Sept. 2017
109. N. STATHAS, E. STREPELIAS, X. PALIOS, S. BOUSIAS and M.N. FARDIS Cyclic lateral loading of dry-jointed precast concrete frames on rocking or fixed footings. 16<sup>th</sup> European Conference on Earthquake Engineering, Thessaloniki, June 2018.
110. S. GRAMMATIKOU, D.E. BISKINIS and M.N. FARDIS, Deformation capacity models of flexure-controlled RC members under lateral cyclic loading 16<sup>th</sup> European Conference on Earthquake Engineering, Thessaloniki, June 2018.
111. S. GRAMMATIKOU, M.N. FARDIS and D.E. BISKINIS. Hysteretic damping in reinforced concrete members and structures. 16<sup>th</sup> European Conference on Earthquake Engineering, Thessaloniki, June 2018.
112. E. LEBOVICH, A.J. KOSMOPOULOS, N.M. FARDIS, T.B. PANAGIOTAKOS and M.N. FARDIS, Benchmark assessment of prototype RC building according to EN1998-3. 16<sup>th</sup> European Conference on Earthquake Engineering, Thessaloniki, June 2018.
113. M.N. FARDIS, D.E. BISKINIS and S. GRAMMATIKOU Quantification and modeling of energy dissipation in RC members. 17th World Conference on Earthquake Engineering, Sendai, Japan, Sept. 2021.

#### **Papers in Refereed National Conferences**

1. M.N. FARDIS, Sulfur Concrete with Fly-ash as an Additive, (in Greek), Proceedings of the 6th Greek Concrete Conference, Vol. I, Ioannina, Greece, Oct. 1983, pp. 53-59.
2. M.N. FARDIS, Practical Checking of the Limit State of Crack Width According to the Requirements of the C.E.B. Model Code, (in Greek), Proceedings of the 6th Greek Concrete Conference, Vol. I, Ioannina, Greece, Oct. 1983, pp. 318-331.
3. M.N. FARDIS, Nonlinear Dynamic Analysis of Reinforced Concrete Structures, Invited Paper, 12th Regional Seminar on Earthquake Engineering, European Association on Earthquake Engineering, Chalkidiki, Greece, Sept. 1985, p. 34.
4. M.N. FARDIS, Impact of the Requirements of the New Code, on the Design Process for Building Structures, (in Greek), Invited Paper, Proceedings of the 7th Greek Concrete Conference, Vol. I, Patras, Greece, Oct. 1985, pp. 280-299.
5. A-M. O. SKOUTEROPOULOU, S.N. BOUSIAS, and M.N. FARDIS, Curved-in-space Free-Standing Stairs as Stiffness Elements of Structures Subjected to Horizontal Actions, (in Greek), Proceedings of the 7th Greek Concrete Conference, Vol. I, Patras, Greece, Oct. 1985, pp. 217-224.
6. GAITANAROS, and M.N. FARDIS, Design Interaction Diagrams, for L-shaped Cross-Sections under Biaxial Bending and Normal Force, (in Greek), Proc. of 7th Greek Concrete Conference, Patras, Oct.

- 1985, Vol. I, pp. 102-110.
7. M.N. FARDIS, Design Aids for Eccentric Punching of Slabs, (in Greek), Proc. of 7th Greek Concrete Conference, Patras, Oct. 1985, Vol. I, pp. 69-76.
  8. M.N. FARDIS, Review of the Behavior of Reinforced Concrete Structures in the Kalamata Earthquake, with Reference to the Relevant Design Codes, Invited Paper (In Greek), Proc. of the 8th Greek Concrete Conference, Kavala, May 1987, Vol. II, pp. 323-343.
  9. V.G. PAPADAKIS, C.G. VAYENAS, and M.N. FARDIS, Physicochemical Processes in Concrete Carbonation, (in Greek), Proc. of the 8th Greek Concrete Conference, Kavala, May 1987, Vol. I, pp. 96-104.
  10. A-M. O. SKOUTEROPOULOU, S.N. BOUSIAS, and M.N. FARDIS, Lateral Stiffness and Earthquake-induced Forces of Helical Stairs, (in Greek), Proc. of the 8th Greek Concrete Conference, Kavala, May 1987, Vol. II, pp. 462-470.
  11. M.G. SFAKIANAKIS, and M.N. FARDIS, Non-linear Dynamic Analysis of Three- Dimensional Reinforced Concrete Structures, by Micro-computer, (in Greek), Proc. of 8th Greek Concrete Conference, Kavala, May 1987, Vol. II, pp. 165-173.
  12. GIANAKAS, D. PATRONIS, and M.N. FARDIS, Influence of the Location and Size of Openings, on the Elastic Stiffness of Infill Walls, (in Greek), Proc. of the 8th Greek Concrete Conference, Kavala, May 1987, Vol. II, pp. 49-56.
  13. V.G. PAPADAKIS, C.G. VAYENAS, and M.N. FARDIS, Effect of Pozolanic Admixtures on the Durability of Reinforced Concrete, (in Greek), Proc. of the Conference on the Utilization of Fly Ash in Greece, Technical Chamber of Greece, Athens, Nov. 1988.
  14. M.G. SFAKIANAKIS, and M.N. FARDIS, A Generalized Force-Deformation Relationship, for Sections of Reinforced Concrete Columns, (In Greek), Proc. of the 9th Greek Concrete Conference, Kalamata, Greece, Feb. 1990, Vol. II, pp. 111-118.
  15. M.G. SFAKIANAKIS, M.N. FARDIS, and S.E. DRITSOS, Analysis of the Response of Reinforced Concrete Buildings to the Kalamata Earthquake, by means of Alternative Methods and Models, and Comparison to the Observed Damage, (in Greek), Proc. of the 9th Greek Concrete Conference, Kalamata, Greece, Feb. 1990, Vol. II, pp. 276-283.
  16. N. FRAGOS, and M.N. FARDIS, Partial and Complete Demolitions of Reinforced Concrete Buildings after the Kalamata Earthquake, (in Greek), Proc. of the 9th Greek Concrete Conference, Kalamata, Greece, Feb. 1990, Vol. II, pp. 328-336.
  17. V.G. PAPADAKIS, C.G. VAYENAS, and M.N. FARDIS, Calculation of Carbonation Depth, in terms of the Physical Characteristics of Concrete and of the Environmental Conditions, (in Greek), Proc. of the 9th Greek Conference, Kalamata, Greece, Feb. 1990, Vol. I, pp. 75-82.
  18. V.G. PAPADAKIS, C.G. VAYENAS, and M.N. FARDIS, Physical Characteristics of Concrete Affecting its Durability, (in Greek), Proc. of the 9th Greek Concrete Conference, Kalamata, Greece, Feb. 1990, Vol. I, pp. 83-87.
  19. HARISIS and M.N. FARDIS, Computer-Aided Strut-and-Tie Model of Plane Reinforced Concrete Elements, (in Greek), Proc. 10th Greek Concrete Conference, Vol.II, Rhodes, Oct. 1991, pp. 81-88.
  20. M.N. FARDIS and P.A. CHRISTOPOULOS, Comparative Study of Damage Indexes for Reinforced Concrete Members under Cyclic Loading, (in Greek), Proc. 10th, Greek Concrete Conference, Vol. II, Rhodes, Oct. 1991, pp. 89-97.
  21. HARISIS and M.N. FARDIS, Automated Design of Reinforced Concrete Buildings According to the New Greek Code, (in Greek), Proc. 10th Greek Concrete Conference, Vol. II, Rhodes, Oct. 1991, pp. 128-136.
  22. S.N. BOUSIAS, G. VERZELETTI, M.N. FARDIS and E. GUTIERREZ, Experimental Investigation of Reinforced Concrete Columns under Cyclic Biaxial Bending with Axial Force, (in Greek), Proc. 10th Greek Concrete Conference, Vol. II, Rhodes, Oct. 1991, pp. 148-155.
  23. F.V. KARANTONI and M.N. FARDIS, Comparative Study of Masonry Buildings Strengthening by means of Reinforced Concrete Elements or Prestressing, (in Greek), Proc. 10th Greek Concrete Conference, Vol. II, Rhodes, Oct. 1991, pp. 258-265.
  24. M.G. SFAKIANAKIS, M.N. FARDIS, Nonlinear Dynamic Analysis in 3D, of Reinforced Concrete Buildings, (in Greek), Proc. 1st Greek Conference on Earthquake Engineering and Engineering

- Seismology, Vol. II, Athens, May 1992, pp. 243-253.
25. F. KARANTONI and M.N. FARDIS, Empirical or Analytical Approaches for Vulnerability Prediction of Stone Masonry Buildings, (in Greek), Proc. 1st Greek Conference on Earthquake Engineering and Engineering Seismology, Vol. II, Athens, May 1992, pp. 392-402.
  26. S.N. ECONOMOU and M.N. FARDIS, Seismic Hazard Analysis on Spectral Acceleration Including Statistical Uncertainty, (in Greek), Proc. 1st Greek Conference on Earthquake Engineering and Engineering Seismology, Vol. II, Athens, May 1992, pp. 116-126.
  27. S.N. ECONOMOU and M.N. FARDIS, Probabilistic Modeling and Simulation of Maximum Elastic Response Spectra in a Structure's Lifetime, (in Greek), Proc. 1st Greek Conference on Earthquake Engineering and Engineering Seismology, Vol. II, Athens, May 1992, pp. 127-137.
  28. HARISIS and M.N. FARDIS, Computer-Aided Design of Two-Dimensional Reinforced Concrete Elements, Proc. 1st National Congress on Computational Mechanics, Athens, Sept. 1992, pp. 529-536.
  29. F.V. KARANTONI and M.N. FARDIS, Static and Dynamic Seismic Response Analyses of Masonry Buildings, Proc. 1st National Congress on Computational Mechanics, Athens, Sept. 1992, pp. 544-551.
  30. S.N. BOUSIAS and M.N. FARDIS, Model of Reinforced Concrete Columns under Cyclic Biaxial Bending with Axial Force, (in Greek), 11th Greek Concrete Conference, Corfu, May 1994, pp. 450-461.
  31. V.G. PAPADAKIS, A.P. ROUMELIOTIS, M.N. FARDIS and C.G. VAYENAS, Influence of Chlorides on the Durability of Reinforced Concrete, (in Greek), 11th Greek Concrete Conference, Corfu, May 1994, pp. 137-151.
  32. S.N. ECONOMOU and M.N. FARDIS, Partial Safety Factors for Seismic Design of Reinforced Concrete Elements, (in Greek), 11th Greek Concrete Conference, Corfu, May 1994, pp. 220-234.
  33. M.G. SFAKIANAKIS and M.N. FARDIS, Force-Deformation Relations for RC Sections under Monotonic Flexure with Axial Force; Curvature Ductility Factors, (in Greek), Proc. 11th Greek Concrete Conference, Corfu, May 1994, pp. 11-25.
  34. V.G. PAPADAKIS, H. KATSAFADOS, Z. CHRISTOU, T.C. TRIANTAFILLOU, M.N. FARDIS and C.G. VAYENAS, Development of High Durability Concrete with Greek Artificial Pozzolans, (in Greek), Proc. 12th Greek Concrete Conference, Limassol, Oct. 1996, Vol. I, p. 340-351.
  35. T.B. PANAGIOTAKOS and M.N. FARDIS, Hysteretic Energy Dissipation in Reinforced Concrete Members under Cyclic Loading, (in Greek), Proc. 12th Greek Concrete Conference, Limassol, Oct. 1996, Vol. II, p. 190-199.
  36. T.B. PANAGIOTAKOS and M.N. FARDIS, Effects of Infills on Seismic Response of Reinforced Concrete Frame Structures, (in Greek), Proc. 12th Greek Concrete Conference, Limassol, Oct. 1996, Vol. II, p. 273-199.
  37. T.B. PANAGIOTAKOS and M.N. FARDIS, Displacement-based Seismic Design of RC Buildings, (in Greek), Proc. 12th Greek Concrete Conference, Limassol, Oct. 1996, Vol. III, p. 123-134.
  38. M.G. SFAKIANAKIS, M.N. FARDIS and V.G. PAPADAKIS, Environmental Effects on Cooling Towers: Causes, Impact on Safety and Retrofit Measures, (in Greek), Proc. 12th Greek Concrete Conference, Limassol, Oct. 1996, Vol. III, p. 559-570.
  39. P. NEGRO, G. VERZELETTI, A. COLOMBO, G. FRANCHIONI, M.N. FARDIS and S.N. BOUSIAS, Ricerca Prenormativa per l' EC8: I Telai Tamponati, (in Italian), Proceedings 8th Italian Conference Earthquake Engineering, Taormina, Sept. 1997.
  40. S.N. BOUSIAS, M.N. FARDIS, T.C. TRIANTAFILLOU and P. MEGREMIS, Behaviour of Lightweight Concrete Beams and Shear Walls, Proc. 13th Greek Concrete Conference, Vol.I, pp.354-361, (in Greek), Rethymno, Oct. 1999.
  41. T.B. PANAGIOTAKOS and M.N. FARDIS, Displacement-based Seismic Design of RC Buildings: Proposed Procedure and Application, Proc. 13th Greek Concrete Conference, Vol.III, (in Greek), Rethymno, Oct. 1999.
  42. M.N. FARDIS, S.N. BOUSIAS, T.B. PANAGIOTAKOS and G. FRANCHIONI, Seismic Response and Design of RC Buildings Irregularly Infilled In-plan, Proc. 13th Greek Concrete Conference, Vol.III, (in Greek), Rethymno, Oct. 1999.
  43. M.N. FARDIS, S.N. BOUSIAS, T.B. PANAGIOTAKOS, P. NEGRO and G. VERZELETTI, Capacity Design of Open Storey in Irregularly Infilled RC Buildings, Proc. 13th Greek Concrete Conference,

- Vol.III, (in Greek), Rethymno, Oct. 1999.
44. T.B. PANAGIOTAKOS and M.N. FARDIS, Displacement-Based Seismic Assessment and Retrofit of RC Buildings, Proc. 2nd Greek Conference for Earthquake Engineering and Engineering Seismology, Thessaloniki, November 2001, Vol.B, (in Greek), pp.103-112.
  45. T.B. PANAGIOTAKOS and M.N. FARDIS, Deformations of Reinforced Concrete Members at Yielding and Ultimate, Proc. 2nd Greek Conference for Earthquake Engineering and Engineering Seismology, Thessaloniki, November 2001, Vol.B, (in Greek), pp.445-454.
  46. T.B. PANAGIOTAKOS and M.N. FARDIS, Effect of Design to EC8 (draft prEN1998-1:2001) on Performance of RC Frames at Collapse Prevention Level, Proc. 2nd Greek Conference for Earthquake Engineering and Engineering Seismology, Thessaloniki, November 2001, Vol.A, (in Greek), pp.413-422.
  47. T.B. PANAGIOTAKOS and M.N. FARDIS, Comparative Performance Evaluation of Multistorey RC Frames Designed according to the Greek Codes or to the 2003 Eurocodes, (in Greek), 14th Greek National Concrete Conference, Kos, Oct. 2003, Vol. A, pp. 258-269.
  48. S.N. BOUSIAS, L.-A. SPATHIS and M.N. FARDIS, Seismic Retrofitting of RC Columns with Corroded Reinforcement, (in Greek), 14th Greek National Concrete Conference, Kos, Oct. 2003, Vol. B, pp. 509-520.
  49. D.E. BISKINIS, G.K. ROUPAKIAS and M.N. FARDIS, Resistance and Design of RC Members for Cyclic Shear, (in Greek), 14th Greek National Concrete Conference, Kos, Oct. 2003, Vol. B, pp. 363-374.
  50. D.E. BISKINIS and M.N. FARDIS, Cyclic Resistance and Deformation Capacity of RC Members, with or without Retrofitting, (in Greek), 15th Greek National Concrete Conference, Alexandroupolis, Oct. 2006, Vol. B, pp. 495-506.
  51. D.E. BISKINIS and M.N. FARDIS, Resistance, Stiffness and Deformation Capacity of Bridge Piers (in Greek), 15th Greek National Concrete Conference, Alexandroupolis, Oct. 2006, Vol. D, pp. 426-437.
  52. S.N. BOUSIAS, M.N. FARDIS, F. SOTIROPOULOS, D. KALTEGIOTIS and M. CHRONOPOULOS, Effect of the Detailing of Transverse Reinforcement on the Seismic Performance of RC Columns, (in Greek), 15th Greek National Concrete Conference, Alexandroupolis, Oct. 2006 Vol. B, pp. 507-516.
  53. S.N. BOUSIAS, L.-A. SPATHIS and M.N. FARDIS, Pseudodynamic Tests of Eccentric RC Building without Engineered Earthquake Resistance, before or after Retrofitting, (in Greek), 15th Greek National Concrete Conference, Alexandroupolis, Oct. 2006, Vol. B, pp. 517-528.
  54. L.-A. SPATHIS, S.N. BOUSIAS and M.N. FARDIS, Tests of RC Columns Retrofitted with Concrete Jackets or FRPs, (in Greek), 15th Greek National Concrete Conference, Alexandroupolis, Oct. 2006, Vol. A, pp. 371-382.
  55. V. BARDAKIS, T.B. PANAGIOTAKOS and M.N. FARDIS, Displacement-based Design of Bridges, (in Greek), 15th Greek National Concrete Conference, Alexandroupolis, Oct. 2006, Vol. B, pp. 459-470.
  56. M.N. FARDIS, Outlook for the Earthquake-Resistant Design of Concrete Buildings, (in Greek), Invited Keynote speech, 15th Greek National Concrete Conference, Alexandroupolis, Oct. 2006, Vol. A, pp. 186-197.
  57. V. BARDAKIS, T.B. PANAGIOTAKOS and M.N. FARDIS, Displacement-based Seismic Design of Bridges (in Greek), 3rd Greek Conference on Earthquake Engineering and Engineering Seismology, paper 2065, Nov. 2008.
  58. S.N. BOUSIAS, X. PALIOS, H. ALEXAKIS, E. STREPELIAS, M.N. FARDIS and S. RAFTOPOULOS, Experimental and analytical study of seismically isolated bridges with or without additional damping (in Greek), 3rd Greek Conference on Earthquake Engineering and Engineering Seismology, paper 2064, Nov. 2008.
  59. A. KOSMOPOULOS and M.N.FARDIS, Simple models for inelastic seismic response analysis of asymmetric multistorey RC buildings, (in Greek), 3rd Greek Conference on Earthquake Engineering and Engineering Seismology, Nov. 2008.
  60. A. KOSMOPOULOS and M.N.FARDIS, Estimation of inelastic seismic deformations in asymmetric multistorey RC buildings (in Greek), 3rd Greek Conference on Earthquake Engineering and Engineering Seismology, Nov. 2008.
  61. M.N.FARDIS, Practical Modelling and Nonlinear Seismic Response Analysis of Concrete Buildings (in Greek), Keynote Lecture, 3rd Greek Conference on Earthquake Engineering and Engineering Seismology,

Nov. 2008.

62. D.E. BISKINIS and M.N. FARDIS, Strength Model for Short Columns in Flexure and Shear (in Greek), 16th Greek National Concrete Conference, Paphos (CY), Oct. 2009, Paper 171105.
63. D.E. BISKINIS and M.N. FARDIS, Ultimate Deformation of FRP-Wrapped RC Members (in Greek), 16th Greek National Concrete Conference, Paphos (CY), Oct. 2009, Paper 171106.
64. A. KOSMOPOULOS, S.N. BOUSIAS and M.N.FARDIS, Pilot application of Eurocode 8 – Part 3 for seismic assessment and strengthening (in Greek), 16th Greek National Concrete Conference, Paphos (CY), Oct. 2009, Paper 171107.
65. E. LIOSATOU and M.N.FARDIS, Strength of Flat Slab-Column Connections in Cyclic Loading (in Greek), 16th Greek National Concrete Conference, Paphos (CY), Oct. 2009, Paper 171108.
66. M.N. FARDIS, Codes in the Age of Globalisation (in Greek), Opening Lecture, 16th Greek National Concrete Conference, Paphos (CY), Oct. 2009, Vol. of Keynote Speeches, pp.1-18.

#### **Papers in Non-refereed International Workshops or Seminars**

1. M.N. FARDIS, Hydrogen Explosion, 8th Water Reactor Safety Research Information Meeting, U.S. Nuclear Regulatory Commission, Gaithersburg, MD, Oct. 1980.
2. M.N. FARDIS, Hydrogen Loading, 9th Water Reactor Safety Research Information Meeting, U.S. Nuclear Regulatory Commission, Gaithersburg, MD., Oct. 1981.
3. M.N. FARDIS, Nonlinear Analysis of Reinforced Concrete Structures, Proc. 12<sup>th</sup> Regional Seminar, European Association of Earthquake Engineering, Chalkidiki, Sept. 1985.
4. M.N. FARDIS, Seismic Behaviour of Monumental and Historical Structures, Proc. International Seminar on Historical and Monumental Structures in Seismic Regions, European Center on Forecasting and Prevention of Earthquakes, Santorini, Oct. 1993.
5. M.N. FARDIS, Assessment of Resistance of RC Structures to Lateral Loads, Proceedings, Centro Internazionale di Aggiornamento Sperimentale-Scientifico, International Seminar “Evoluzione Nella Sperimentazione per le Costruzioni, Corinth, April 1998.
6. M.N. FARDIS, European Activities in Seismic Repair and Strengthening of Buildings, Proc. Tubitak-Worldbank Workshop on seismic vulnerability assessment and rehabilitation strategies for Turkey, Ankara, May 2000.
7. M.N. FARDIS, C.S. OLIVEIRA and J.G. BOUWKAMP, Proposed Changes in the Design Rules for Earthquake Resistant Buildings – Part 1 of EC8 – First Draft of prEN1998-1, Proc. of European Commission Workshop “Mitigation of seismic risk - Support to recently affected European countries”, Belgirate, November 2000.
8. M.N. FARDIS, Eurocode 8 – Present State, Pre-normative and Co-normative Research Needs (including design seismic actions), Proc. of European Commission Workshop “Mitigation of seismic risk - Support to recently affected European countries”, Belgirate, November 2000.
9. M.N. FARDIS, Seismic Retrofit Techniques for Undamaged or Damaged Buildings- Evaluation of Various Alternatives, Twin Workshop “Seismic Assessment and Retrofitting of Buildings”, Athens-Istanbul, Technical Chamber of Greece - Istanbul Branch of Turkish Chamber of Civil Engineers (IMO), January 2001.
10. M.N. FARDIS, Displacement-based Seismic Assessment of RC Buildings, Proc. Seminar on Assessment and Upgrading of Concrete and Masonry Structures, European Council for Construction Research, Development and Innovation, Corfu, June 2001.
11. M.N. FARDIS, Concrete Walls in Eurocode 8, AFPS-ACI-JCI post-FraMCoS-4 Workshop: “Seismic loading effects & CAMUS 3 benchmark”, Paris, June 2001
12. M.N. FARDIS and T.B. PANAGIOTAKOS, Effect of Design Parameters and Immediate Occupancy Design on Performance of RC Frames at Collapse Prevention Level, Proc. 3<sup>rd</sup> US-Japan Workshop on Performance-based earthquake engineering methodology for reinforced concrete building structures, Seattle, WA, August 2001.
13. M.N. FARDIS, Displacement-based Seismic Assessment and Retrofit of Reinforced Concrete Buildings, Proc. 20<sup>th</sup> European Regional Earthquake Engineering Seminar, European Association of Earthquake Engineering, Sion, Sept. 2001

14. M.N. FARDIS, Eurocode 8: Design of structures for earthquake resistance, Consensus Conference on Technical Construction Standards in the Caribbean , Barbados, February 2003
15. T.B. PANAGIOTAKOS and M.N. FARDIS, Performance of RC Frame Buildings Designed for Alternative Ductility Classes According to Eurocode 8 (Final Version, 2003), Proc. 5th US-Japan Workshop on Performance-based Earthquake Engineering methodology for Reinforced Concrete building structures, Hakone, Japan, Sept. 2003.
16. M.N. FARDIS, The Displacement-based Approach in Eurocode 8 (with Emphasis on Assessment of Existing Buildings), IAEA Workshop on Safety Significance of Near-Field Earthquakes, Trieste, March 2004.
17. M.N. FARDIS, Seismic Assessment & Retrofitting of Existing (RC) Buildings According to Eurocode 8, Ministry of Public Works and Resettlement, Workshop on New Turkish Seismic Rehabilitation Code, Ankara, April 2004.
18. M.N. FARDIS, Context of EC8 and Design Actions, SECED - Imperial College, Short Course on Practical Seismic Design, Principles & Application to EC8, London, Sept. 2004.
19. M.N. FARDIS, Seismic Repair and Retrofitting of RC Structures, Invited Lecture, Institution of Civil Engineers, London, Sept. 2004.
20. M.N. FARDIS, Current Developments and Future Prospects of the European Code for Seismic Design and Rehabilitation of Buildings: Eurocode 8, Invited Lecture to International Seminar on Prevention and Protection of Constructions against Seismic Risks, Luso-American Development Foundation (Fundação Luso-Americana para o Desenvolvimento, FLAD), Lisbon, Nov. 2004
21. M.N. FARDIS, Tools for Deformation-Controlled Seismic Design, Assessment and Retrofitting of Concrete Structures, Invited Lecture to International ETH Seminar: Future Challenges in Earthquake Engineering, Institute of Structural Engineering, ETH (Federal Institute of Technology), Zurich, Nov. 2004.
22. M.N. FARDIS, Eurocode 8: Design of structures for earthquake resistance, 1-day ETEK-CYS Course: Eurocodes: Building Codes for Europe, Technical Chamber of Cyprus (ETEK), Nicosia, Cyprus, May 2005.
23. M.N. FARDIS, Design Rules for Seismic Retrofitting with FRPs According to Eurocode 8 and Their Background, fib Short Course: "Retrofitting of Concrete Structures through Externally Bonded FRPs with emphasis on Seismic Applications". Middle-East Technical University, Ankara, June 2005.
24. M.N. FARDIS, Design Rules for Seismic Retrofitting with FRPs According to Eurocode 8 and Their Background, fib Short Course: "Retrofitting of Concrete Structures through Externally Bonded FRPs with emphasis on Seismic Applications", Istanbul Branch of Turkish Chamber of Civil Engineers (IMO), Istanbul, June 2005.
25. M.N. FARDIS, Eurocode 7: Geotechnical Design, 1-day Training Seminar, EU MEDA project, "Support to the Quality Infrastructure in Turkey", Training in Eurocodes, Ministry of Public Works & Settlement, Ankara, June 2005.
26. M.N. FARDIS, Eurocode 8: Design of structures for earthquake resistance, 2-day Training Seminar, EU MEDA project, "Support to the Quality Infrastructure in Turkey", Training in Eurocodes, Ministry of Public Works & Settlement, Ankara, June 2005.
27. M.N. FARDIS, Design Rules for Seismic Retrofitting with FRPs According to Eurocode 8 and Their Background, fib Short Course: "Retrofitting of Concrete Structures through Externally Bonded FRPs with emphasis on Seismic Applications". Sociedad Mexicana de Ingenieria Estructural, A.C., Mexico City, May 2006.
28. M.N. FARDIS, Seismic Input for Design with Eurocode 8, Invited Contribution to Panel Discussion on "Seismic Input for Design" in Common Session 1 (CS1), 1st European Conference on Earthquake Engineering and Seismology (a joint event of the 13th ECEE and the 30th General Assembly of the ESC), Geneva, September 2006.
29. M.N. FARDIS, Seismic Retrofitting of Buildings, Twin Workshop "Production of Buildings in Turkey & Greece", Istanbul - Athens, Technical Chamber of Greece - Istanbul Branch of Turkish Chamber of Civil Engineers (IMO), September 2006.
30. M.N. FARDIS, Eurocode 8: Design of structures for earthquake resistance, Technical Chamber of

- Cyprus (ETEK), Nicosia, Cyprus, Nov. 2006.
31. M.N. FARDIS, Eurocode 8 – Buildings – Reinforced Concrete and Masonry, Workshop on the use of the Eurocodes in the Mediterranean Countries, European Commission’s JRC and DG Enterprise, Varese, Italy, Nov. 2006.
  32. M.N. FARDIS, Eurocode 8 and other seismic design codes, Workshop on the use of the Eurocodes in the Mediterranean Countries, European Commission’s JRC and DG Enterprise, Varese, Italy, Nov. 2006.
  33. M.N. FARDIS, EN 1998: Eurocode 8 - Design of Structures for Earthquake Resistance, ETEK 2-day training program, Nicosia, June 2007
  34. M.N. FARDIS, Displacement- and Performance-Based Seismic Design of Concrete Structures, Keynote Lecture, *fib*-days 2009, Jan. 2010, Kolkata.
  35. M.N. FARDIS, Design of concrete buildings - Local effects due to infills - Design and detailing of secondary seismic elements - Provisions for concrete diaphragms, "European Commission Workshop on "Eurocode 8 - Seismic Design of Buildings", Lisbon, Feb. 2011
  36. M.N. FARDIS, Retrofitting for seismic loading. "*fib* course Durability and Retrofitting of Concrete Structures", Nicosia, Apr. 2011
  37. M.N. FARDIS, Performance- and Displacement-based Seismic Design of Concrete Structures, La Universidad Autonoma Metropolitana, Conferencias sobre Ingenieria Sismica, Mexico City, June 2012
  38. M.N. FARDIS, Seismic Isolation Principles and Practice in the Context of European Standards "PROTA 28th Anniversary Symposium: Seismic Isolation Methods and Practices", Ankara, Feb. 2013
  39. M.N. FARDIS, Seismic design, assessment or retrofitting of buildings in Eurocode 8 – Parts 1 & 3, AFAD Workshop on the new Turkish Code, Istanbul, June 2013
  40. M.N. FARDIS, Next Eurocode 8 and Performance-based seismic design philosophy "PROTA 30th Anniversary Symposium: New Generation of Seismic Codes and New Technologies in Earthquake Engineering", Ankara, Feb. 2015
  41. M.N. FARDIS, Earthquake resistant design according to Eurocode 8, Seoul National University, Seoul, April 2015
  42. M.N. FARDIS, Earthquake loads in Eurocode 8 for Low-to-Medium Seismicity Regions "Symposium: Performance-based Seismic Engineering in Low-to-Moderate Seismicity Regions", Architectural Institute of Korea, Seoul, April 2015
  43. M.N. FARDIS, Towards a second generation of European Standards on Eurocodes, "4th European Standardisation Summit", Riga, June 2015
  44. M.N. FARDIS, Second generation of the Eurocodes – addressing new challenges, "European Forum for Science and Industry – JRC side-event to the Standardization Summit", Riga, June 2015.
  45. M.N. FARDIS, Design of concrete buildings for resilience to earthquakes and blast. European Commission Workshop "Guidelines for the Protection of Critical Built Infrastructure", Institute for the Protection and Safety of the Citizen, Joint Research Centre, Ispra, June 2015.
  46. M.N. FARDIS, Seismic design of concrete buildings and the Eurocodes – The importance of concrete quality, "TITAN USJE Conference: Influence of building materials on construction quality" Skopje, MK, Sept. 2015
  47. M.N. FARDIS, EN 1998-3: Seismic assessment and retrofitting of existing buildings. European Commission Workshop "Elaboration of Maps for Climatic and Seismic Actions for Structural Design in the Balkan Region", Zagreb, Oct. 2015.
  48. M.N. FARDIS, Seismic assessment and retrofitting of existing buildings in Eurocode 8 - Part 3 (with emphasis on concrete buildings), Standards Institution of Israel, Tel Aviv, June 2016.
  49. M.N. FARDIS, EN 1998-1:2004 (Part 1 of Eurocode 8) Design of Structures for Earthquake Resistance - General rules, Seismic action, rules for buildings" (with emphasis on concrete buildings) , "Workshop: Adoption of Eurocodes for Design of Concrete Structures".Tel Aviv, July 2018
  50. M.N. FARDIS, Seismic assessment and retrofitting of buildings in EN 1998-3:2005 (Eurocode 8 - Part 3) (with emphasis on concrete buildings), "Workshop: Adoption of Eurocodes for Design of Concrete Structures".Tel Aviv, July 2018
  51. M.N. FARDIS, Application of EN 1990:2002, EN 1991-1-1:2004, EN 1997-1:2004 & EN 1998-1:2004

for the design of a 6-story RC building with two basements (extended Lisbon example), "Workshop: Adoption of Eurocodes for Design of Concrete Structures".Tel Aviv, July 2018

52. M.N. FARDIS, Application of EN 1998-3:2005 (Eurocode 8 - Part 3) to seismic assessment/ retrofitting of concrete buildings, "Workshop: Adoption of Eurocodes for Design of Concrete Structures".Tel Aviv, July 2018
53. M.N. FARDIS, The impact of the Model Codes of CEB/FIP and fib through the Structural Eurocodes as European Standards. Tongji University, Shanghai, Oct. 2018
54. M.N. FARDIS, Structural Eurocodes as European Standards – Eurocode 8 “Design of structures for earthquake resistance”, Tongji University, Shanghai, Oct. 2018

### **Recent Reports**

- D. BISKINIS and M.N. FARDIS, Deformations of concrete members at yielding and ultimate under monotonic or cyclic loading (including repaired and retrofitted members). Report no. SEE 2009-01 in Report Series in Structural and Earthquake Engineering, University of Patras, Dept. of Civil Engineering, January 2009, ISBN 978-960-89691-6-2, 76p
- M.N. FARDIS and G. TSIONIS, Application of EN-Eurocode 8 Part 1 for the seismic design of multistorey concrete buildings. Report no. SEE 2011-01 in Report Series in Structural and Earthquake Engineering, University of Patras, Dept. of Civil Engineering, January 2011, ISBN 978-960-89691-2-4, 245p (translated in Greek: ISBN 978-960-89691-3-1, 226p)
- M.N. FARDIS, V. KOLIAS, T. PANAGIOTAKOS, C. KATSARAS, T. PSYCHOGIOS, Guide for bridge design with emphasis on seismic aspects. Report no. SEE 2012-01 in Report Series in Structural and Earthquake Engineering, University of Patras, Dept. of Civil Engineering, January 2012, ISBN 978-960-89691-1-7, 303p (translated in Greek: ISBN 978-960-89691-9-3, 350p).
- E. STREPELIAS, M.N. FARDIS, S. BOUSIAS, X. PALIOS, D. BISKINIS, RC frames infilled into RC walls for seismic retrofitting: Design, experimental behavior and modeling, Report no. SEE 2012-02 in Report Series in Structural and Earthquake Engineering, University of Patras, Dept. of Civil Engineering, January 2012, ISBN 978-960-89691-7-9, 48p.

### **Research Projects in the past 10 years**

#### ***European Community (EC) projects co-ordinated by M.N. Fardis***

- "Seismic Engineering Research Infrastructures for European Synergies (SERIES)" [www.series.upatras.gr](http://www.series.upatras.gr) Grant Agreement N° 227887 - Framework Programme 7; Capacities Specific Programme: Research Infrastructures. Integrating Activity: Combination of Collaborative Project and Coordination & Support Action. 01/03/2009-31/07/2013. Total EC contribution for 23 partners: 8,700,000 €; EC contribution for the University of Patras as the Co-ordinator and one of the partners: 673,202 €. M.N. FARDIS was the leader and co-ordinator of the 23-strong Consortium.
- "Advanced Centre of Excellence in Structural and Earthquake Engineering (ACES)" [www.aces.upatras.gr](http://www.aces.upatras.gr). Grant Agreement N° 204697. Framework Programme 7, FP7-REGPOT-2007-1 (Unlocking and developing the research potential in the EU's convergence regions and outermost regions): Support Action. 1/02/2008-31/01/2012. EC contribution for the University of Patras as a single partner: 1,099,999.59 €. M.N. FARDIS was the leader and co-ordinator of the project.
- "Seismic Performance Assessment and Rehabilitation (SPEAR)". Contract N° G6RD-CT2001-00525. Framework Programme 6, Growth - Dedicated call April 2000: M&T, Infrastructure 1/09/2001-28/02/2005. Total EC contribution for the 9 partners: 1,344,442 €; EC contribution for the University of Patras as the Co-ordinator and one of the partners: 143,328 €. M.N. FARDIS was the leader and co-ordinator of the 9-strong Consortium.

#### ***Multi-partner EC projects with M.N. Fardis as Principal Investigator (PI) for the University of Patras***

- "Systemic Seismic Vulnerability & Risk Analysis for Buildings, Lifeline Networks & Infrastructures Safety Gain (SYNERG)" Grant Agreement N° 244061, Framework Programme 7, FP7-ENV-2009-1 (ENV.2009.1.3.2.2: Vulnerability assessment of buildings, lifelines systems and networks related to earthquakes): Collaborative project. 1/11/2009-31/3/2013.

EC contribution for the University of Patras as a partner: 200,000 €.

- "Risk Mitigation for Earthquakes & Landslides (LESSLOSS)". Grant agreement no.: 505448. Framework Programme 6: Integrated Project, Research and technological development programme, Integrating and Strengthening the ERA. 1/09/2004-31/08/2007.

EC contribution for the University of Patras as a partner: 144,900.55 €.

M.N. FARDIS was the lead technical person for the University of Patras and technical co-ordinator of one of the sub-projects (SP8).

- "Safety Assessment for Earthquake Risk Reduction (SAFERR)". Contract No: HPRN-CT-1999-00035. Framework Programme 6, Improving Human Research Potential. 1/07/2000-31/12/2003.  
EC contribution for the University of Patras as a partner: 110,000 €.

***Participation in other multi-partner international projects with M.N.Fardis as PI for the University of Patras team***

- "Seismic Vulnerability & Strengthening of Existing Privately-Owned Buildings". Framework Programme for Research, Technological Development & Innovation 2008 of the Research Promotion Foundation of the Republic of Cyprus (RPF's FP 2008). 01/12/2008-30/04/2011.

Budget for the University of Patras as a partner: 41,800 €.

- "Seismic Assessment and Rehabilitation of Existing Buildings". Sfp 977231, NATO Science-for-Peace Programme. 01/06/2001-31/05/2004.

Budget for the Patras team as a partner: 57,000 €.

M.N. FARDIS was the lead technical person and Project Co-Director for FORTH/ICE-HT, Patras.

***International single-partner projects with M.N.Fardis as PI***

- "Co-ordination of the Conversion of ENV 1998 (Eurocode 8) into EN". Contract with the British Standards Institute. 01/03/1999-31/03/2005.

Budget: 34,264.37 €.

***National multi-partner projects with M.N.Fardis as PI for the University of Patras***

- "Seismic Protection of Bridges (ASPROGE)". General Secretariat for Research & Technology: 3rd EC Support Framework for Competitiveness - Measure 4.5; Action 4.5.1: Built Environment & Seismic Risk Management. 1/10/2003-31/03/2007.

Budget for the University of Patras: 96,000 €.

***National single-partner projects with M.N.Fardis as PI***

- "Paradigm for Resilient Concrete Infrastructures to Extreme Natural or Man-made Threats (PRESCIENT)" Grant ERC-12, General Secretariat for Research & Technology. 29/05/2013-31/10/2015.

Budget: 1,029,500 €.

- "Experimental Investigation of 4-story RC (Reinforced Concrete) Frames Retrofitted with RC Infilling into RC Walls - Proposals for the Retrofitting Code". Contract with the Earthquake Planning & Protection Organisation. 22/02/2010-31/05/2011.

Budget: 30,000 € (plus VAT).

- "Investigation of Reinforcement Corrosion at the Municipal Theatre Building "Kefalos" and of the Impact on Structural Adequacy - Strengthening Measures". Contract with the Argostoli Municipality. 13/07/2004-31/10/2007.

Budget: 50,000 € (plus VAT).

- "Impact of the Detailing of Transverse Reinforcement on the Seismic Performance of Reinforced Concrete Columns". Contract with SIDENOR, S.A. 22/07/2003-22/05/2004.

Budget: 60,000 € (plus VAT).

***National multi-partner projects where M.N.Fardis participated as member of the research team***

- "Seismic Vulnerability Assessment of Existing Buildings & Development of Advanced Retrofitting Materials/Techniques (ARISTION)". General Secretariat for Research & Technology: 3rd EC Support

Framework for Competitiveness - Measure 4.5; Action 4.5.1: Built Environment & Seismic Risk Management. 1/10/2003-31/03/2007.

Budget for M.N. FARDIS's participation in the project: 75,000 €.