

Curriculum Vitae
Professor Constantin E. Chalioris, Dr. Civil Engineer
Deputy Head of Civil Engineering Department
(May 2022)

Personal data

- Family name: CHALIORIS
 - First name: Constantin
 - Place of birth: Chios, Greece
 - Year of birth: 1971
 - Nationality: Hellenic
 - Marital status: Married, with one child
 - University address: Democritus University of Thrace (DUTH)
Department of Civil Engineering - Structural Engineering Division
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Education - Studies

- June 1988 Graduate of High School of Athens, Greece.
- July 1993 Diploma in Civil Engineering (5-year course), School of Engineering, Democritus University of Thrace, Greece. Grade: 8.37 (84%).
Awards from the State Scholarships Foundation (I.K.Y.) and from the Technical Chamber of Greece for excellences at the 1st, 2nd, 4th and 5th academic year with grades 8.53, 8.21, 8.06 and 9.43, respectively.
- Nov. 1999 Postgraduate Specialization Diploma (M.Sc.) in Structural Engineering (one-year course) entitled: “*New Materials and Technologies for the Design of Reinforced Concrete Structures*”, Department of Civil Engineering, Democritus University of Thrace. Grade point average: 9.10 (91%).
- Feb. 2000 Doctoral Diploma (Ph.D.) in Civil Engineering, Democritus University of Thrace. Dissertation title: “*Study of the Behaviour and the Failure Mechanisms of Plain and Reinforced Concrete Elements in Torsion*”. Grade: 10 (100%).

Academic career

- 1994-2003 Laboratory teaching assistant and associate in research projects of Reinforced Concrete Laboratory, Department of Civil Engineering, Democritus University of Thrace.
- Dec. 2003 Lecturer,
- Oct. 2009 Assistant Professor,
- July 2014 Associate Professor,
- Mar. 2022 Professor (full) in Structural Engineering Division of Civil Engineering Department, School of Engineering, Democritus University of Thrace, Greece, in the field of: “*Experimental Research of Linear Reinforced Concrete Members*”.

Academic administration in Democritus University of Thrace (DUTH)

- 2011-2013 Member of the Senate of DUTH as representative of Civil Engineering Department.
- 2016-2019 Director of the Structural Engineering Division of Civil Engineering Department.
- since 2019 Chairman of the University Technical Council.
- since 2020 Deputy Head of Civil Engineering Department.

Research interests

- Design and analysis of reinforced / prestressed concrete and masonry structures
- Testing of reinforced concrete members under static and cyclic loading
- Repair and strengthening of concrete members and structures (resin injections, Fibre-Reinforced-Polymer materials, reinforced cast-in-place concrete, self-compacting concrete and shotcrete jacketing)
- In-situ testing and capacity assessment of reinforced concrete structures
- Torsion and shear of plain, fibre, reinforced and prestressed concrete members
- Steel fibre reinforced concrete behaviour
- Damage detection and real time structural integrity assessment of concrete members using piezoelectric sensors

Achievements – Distinctions - Awards

- **World's Top 2% Scientists** in lists of May 2020 (for the year **2019**) and August 2021 (for the year **2020**): List of the top 2% most widely cited scientists in different disciplines. Ranking of Stanford University considered the most prestigious worldwide, is based on the bibliometric information contained in the Scopus database. Site of the database list: <https://dx.doi.org/10.17632/btchxktyw>.

Awards of published articles in International refereed journals:

- Article published in “*Construction and Building Materials*” (Elsevier):
C.E. Chalioris, “Torsional Strengthening of Rectangular and Flanged Beams using Carbon Fibre-Reinforced-Polymers – Experimental Study”, Construction and Building Materials, Vol. 22, No. 1, pp. 21-29, 2008.
List of “Top 25 Hottest Articles” from Oct. to Dec. 2007 “The Top 25 is a free service which provides lists of most read articles - counted by article downloads on SciVerse ScienceDirect”.
- Article published in “*Case Studies in Construction Materials*” (Elsevier):
C.E. Chalioris et al. “Applications of Smart Piezoelectric Materials in a Wireless Admittance Monitoring System (WiAMS) to Structures - Tests in RC Elements”, Case Studies in Construction Materials, Vol. 5, pp. 1-18, 2016.
List of top 25 “Most Cited Case Studies in Construction Materials Articles” from 2013 till today.
- Article published in “*Fibers*” (MDPI):
C.E. Chalioris et al. “Investigation of a New Strengthening Technique for RC Deep Beams using Carbon FRP Ropes as Transverse Reinforcements”, Fibers, Vol. 6, No. 3, article number 52, 18 pages, 2018.
List of top 10 “Most Cited” articles.
- Article published in “*Buildings*” (MDPI):
C.E. Chalioris et al. “Repair of Heavily Damaged RC Beams Failing in Shear using U-Shaped Mortar Jackets”, Buildings, Vol. 9, No. 6, article number 146, 18 pages, 2019.
Awarded with the “Certificate Editor’s Choice Articles” in recognition of the outstanding publication.
- Article published in “*Fibers*” (MDPI):
C.E. Chalioris et al. “U-Jacketing Applications of Fiber-Reinforced Polymers in Reinforced Concrete T-Beams against Shear - Tests and Design”, Fibers, Vol. 8, No. 2, article number 13, 22 pages, 2020.
Awarded as “Editor’s Choice Article” list of top 10 “Most Cited and Viewed – Last 36 months” articles.
- Article published in “*Sensors*” (MDPI):
C.E. Chalioris et al. “Flexural Damage Diagnosis in Reinforced Concrete Beams Using a Wireless Admittance Monitoring System - Tests and Finite Element Analysis”, Sensors, Vol. 21, No. 3, article number 679, 25 pages, 2021
Awarded with “Certificate Editor’s Choice Articles” in recognition of the outstanding publication.
- Article published in “*Fibers*” (MDPI):
Golias E., Zapris A.G., Kytinou V.K., Osman M., Koumtzis M., Siapera D., Chalioris C.E., Karayannis C.G., “Application of X-shaped CFRP ropes for Structural Upgrading of Reinforced Concrete Beam-Column Joints under Cyclic Loading – Experimental Study”, Fibers, Vol. 9, No. 7, article number 42, 15 pages, 2021.
Awarded as “Editor’s Choice Article” list of top 10 “Most Cited and Viewed – Last 12 months” articles.

As reviewer:

- Awarded as “**2015 ASCE Outstanding Reviewer**” from “*Journal of Structural Engineering*” (American Society of Civil Engineers, ASCE).
- Awarded as “**Top Peer Reviewer 2019**” from “*Publons*” for placing in the top 1% of reviewers in Cross-Field on Publons global reviewer database, determined by the number of peer review reports performed during 2018-19.
- Awarded with the “**Certificate of Excellence in Reviewing 2020**” from “*Nuclear Engineering and Technology*” (Elsevier) in recognition of an outstanding contribution to the quality of the journal for the year 2020.
- Awarded with the “**Certificate of 2020 Outstanding Reviewer Award**” from “*Fibers*” (MDPI).
- Awarded with the “**Certificate of Excellence in Reviewing 2021**” from “*Journal of Engineering Research and Reports*” in recognition of an outstanding contribution to the quality of the journal for the year 2021.

Teaching and academic experience

- Teaching in Democritus University of Thrace:

Undergraduate courses in Department of Civil Engineering:

- “Reinforced Concrete IA” (7th semester – core course), since 2004-05.
- “Prestressed Concrete” (9th semester – compulsory course of Structural Engineering), since 2004-05.
- “Reinforced Concrete II” (8th semester – compulsory course of Structural Engineering), 2011-12.
- “Reinforced Concrete Laboratory Issues” (8th semester – elective course), since 2004-05.
- “Design of Masonry Structures” (8th semester – elective course), since 2004-05.
- “Testing and Rehabilitation of Reinforced Concrete Structures” (9th semester – elective course), since 2010-11.
- “Composite Structures” (9th semester – elective course), since 2014-15.

Undergraduate courses in Department of Environmental Engineering:

- “Reinforced Concrete Structures” (8th semester – core course), from 2013-14 till 2015-16.

Postgraduate courses in Structural Engineering:

- “Design of Reinforced Concrete Members” (compulsory course), since 2004-05.
- “Software and Computer Science for the Design of Reinforced Concrete Structures” (elective course), since 2010-11.
- “Design of Reinforced Concrete Members Strengthened with Composite Materials (FRPs)” (elective course), since 2010-11.

- Supervisor of 3 completed doctoral dissertations in Civil Engineering Dept. of DUTH:

June 2019: “Study of reinforced concrete structures strengthened by tension ties - Analytical and experimental investigation” by Ang. Liolios.

July 2020: “Alternative methods of non-conventional reinforcing of reinforced concrete elements to improve their behavior under monotonic and cyclic loading, considering the tensile residual stiffness of concrete” by Violetta Kytinou.

Dec. 2020: “Failure mechanisms and experimental study of reinforced concrete elements with shear problems” by Parthena-Maria Kosmidou. (co-supervisor with Professor C.G. Karayannis)

- Supervisor of 3 doctoral candidates in Civil Engineering Dept. of DUTH.
- Supervisor of over 200 undergraduate diploma theses and postgraduate dissertations in Civil Eng. Dept. of DUTH.
- Advisor of 3 completed doctoral dissertations in Civil Engineering Dept. of DUTH.
- Advisor of 5 doctoral candidates in Civil Engineering Dept. of DUTH and 1 doctoral candidate in School of Civil Engineering of National Technical University of Athens.
- Examiner of over 20 doctoral dissertations in Civil Engineering Dept. of DUTH, in Architectural Engineering School of Technical University of Crete, in Civil Engineering Dept. of University of Patras, in Civil Engineering Dept. of Aristotle University of Thessaloniki.
- External/Foreign Examiner of 5 doctoral dissertations in Civil Engineering Dept. of Acharya Nagarjuna University, Andhra Pradesh, India (11/2019), in Civil Engineering Faculty of Anna University, Chennai, India (11/2019, 10/2020), in Civil Engineering Faculty of Bharath Institute of Higher Education and Research, Chennai, India (10/2020) and in Civil Engineering Faculty of Vilnius Gediminas Technical University, Lithuania (10/2020).
- Evaluator of research project proposals to be funded by the (a) Romanian National Council for Research and Development (UEFISCDI), (b) Foundation for Science and Technology of Portugal (FCT) and (c) Prince Sultan University, Riyadh, Saudi Arabia in the area of Building Technology - Construction Materials.
- Evaluator of electronic book proposals to be funded by Hellenic Academic EBooks – Kallipos (www.kallipos.gr).
- Other related activities:
 - Instructor in seminars of Technical Chamber of Greece, Centre of Employment Opportunities (K.E.K.) and National Institute of Employment Opportunities (I.E.K.), from 1993 till 2000.
 - Lectures in meetings organized by Technical Chamber of Greece, on subjects in the field of Eurocodes (EC2 and EC8), design of reinforced concrete structures, repair and strengthening of structures, since 1995.
 - Member of the educational personnel of the Training Institute (IN.EP.) of National Centre for Public Administration and Local Government (E.K.D.D.A.) for the continuous training (via seminars) of the Engineers of public services and local government, on subjects in the field of construction materials, in-situ testing, Eurocodes (EC2, EC5 and EC6), capacity assessment, repair and strengthening techniques of existing reinforced concrete structures, since 2003.
 - Member of the three-member examination committees of Technical Chamber of Greece (East-Macedonian Dept.) for examining and awarding professional licenses of civil engineers, since 2007.

Associate and Academic Editor of the journals:

- *Advances in Civil Engineering* (Hindawi Publishing Corporation) – **Associate Editor**
- *Sustainability* (MDPI Publ.) – **Section board member**
- *Fibers* (MDPI Publ.) – **Editorial board member**
- *The Open Civil Engineering Journal* (Bentham Science Publishers) – **Editorial board member**

Guest Editor of Special Issues (SI) of the journals:

- *Sustainability* – SI: “Sustainable Construction and Building Materials”
- *Fibers* – 1st SI: “Steel Fibre Reinforced Concrete Behaviour”
– 2nd SI: “Fiber-Reinforced Polymers and Fiber-Reinforced Cement Composites as Concrete Reinforcement”
– 3rd SI: “Fiber-Reinforced Polymers and Fiber-Reinforced Cement-Based Mortars in Repair/Strengthening Methods of Masonry and Reinforced Concrete Structural Members” (coeditor Prof. C.G. Karayannis)

Reviewer in more than 80 peer-reviewed journals (more than 550 papers have been evaluated since 2007). Selection of journals:

Publisher	International journals
ASCE (American Society of Civil Engineers)	<i>Journal of Bridge Engineering, Journal of Composites for Construction, Journal of Structural Engineering</i> (also <u>awarded</u> as: “ 2015 ASCE Outstanding Reviewer ”)
Elsevier	<i>Advances in Engineering Software, Automation in Construction, Case Studies in Construction Materials, Cement and Concrete Composites, Composites Part B, Composite Structures, Construction and Building Materials, Engineering Structures, Journal of Building Engineering, Journal of Physics and Chemistry of Solids, Materials Today Communications, Mechanical Systems and Signal Processing, Nuclear Engineering and Technology</i> (also <u>awarded</u> with the: “ Certificate of Excellence in Reviewing 2020 ”), <i>Scientia Iranica, Structures</i>
Techno Press	<i>Advances in Concrete Construction, Computers and Concrete, Earthquake and Structures, Smart Structures and Systems, Steel and Composite Structures, Structural Engineering and Mechanics</i>
Springer	<i>Asian Journal of Civil Engineering, Bulletin of Earthquake Engineering, Frontiers of Structural and Civil Engineering, International Journal of Concrete Structures and Materials, Journal of Electroceramics, Korean Society of Civil Engineers (KSCE) Journal of Civil Engineering, Materials Science, Meccanica, Sadhana</i>
De Gruyter	<i>Open Engineering (formerly Central European Journal of Engineering), Science and Engineering of Composite Materials</i>
Taylor & Francis	<i>European Journal of Environmental and Civil Engineering, International Journal for Computational Methods in Engineering Science and Mechanics, Mechanics of Advanced Materials and Structures, Structure and Infrastructure Engineering</i>
Hindawi Publ. Corp.	<i>Advances in Civil Engineering, Advances in Materials Science and Engineering, International Journal of Polymer Science, Journal of Structures, The Scientific World Journal</i>
Bentham Sci. Publ.	<i>Recent Patents on Engineering, The Open Civil Engineering Journal</i>
IOP science	<i>Engineering Research Express, Europhysics Letters, Materials Research Express, Smart Materials and Structures</i>
MDPI Publ.	<i>Applied Sciences, Buildings, Designs, Fibers, Infrastructures, Materials, Metals, Molecules, Polymers, Recycling, Sensors, Sustainability</i>
Wiley & Sons	<i>Material Design and Processing Communication, Structural Concrete (fib journal)</i>

Also:

- *ACI SP-344* (American Concrete Institute, ACI-ASCE Committee 445 - Shear and Torsion)
- *Advances in Structural Engineering* (Sage Journals)
- *American Journal of Engineering and Applied Sciences* (Science Publications)
- *Engineering Journal* (Faculty of Engineering, Chulalongkorn University, Thailand)
- *Environmental Engineering and Management Journal* (Gheorghe Asachi Technical University of Iasi)
- *Journal of Civil Engineering and Construction Technology* (Academic Journals)
- *Journal of Civil Engineering and Science* (World Academic Publishing)
- *Journal of Civil Engineering Sciences* (Iran Univ. of Science and Technology - Iran Society of Civil Eng. - Mind Reader Publ.)
- *Materials Research* (Universida de Federal de Sao Carlos)
- *Mathematical Biosciences and Engineering* (AIMS Press)
- *Multidiscipline Modeling in Materials and Structures* (Emerald Publishing)
- *Natural Hazards and Earth System Sciences* (European Geosciences Union - Copernicus Publications)
- *Science of Advanced Materials* (American Scientific Publishers)
- *Structural Engineering International* (International Association for Bridge and Structural Engineering - IABSE)

Doctoral dissertation

1. Chalioris C.E., “*Study of the Behaviour and the Failure Mechanisms of Plain and Reinforced Concrete Elements in Torsion*”, **Doctoral Dissertation**, Civil Engineering Dept., School of Engineering, Democritus University of Thrace, Xanthi, Greece, 440 pp., 1999.

International refereed journals

2. [J01] Karayannis C.G., Chalioris C.E., Sideris K.K., “*Effectiveness of RC Beam-Column Connection Repairing using Epoxy Resin Injections*”, **Journal of Earthquake Engineering**, Vol. 2, No. 2, pp. 217-240, 1998.
3. [J02] Karayannis C.G., Chalioris C.E., “*Experimental Validation of Smeared Analysis for Plain Concrete in Torsion*”, **Journal of Structural Engineering, ASCE**, Vol. 126, No. 6, pp. 646-653, 2000.
4. [J03] Karayannis C.G., Chalioris C.E., “*Capacity of RC Joints Suffered Early-age Cyclic Loading*”, **Journal of Earthquake Engineering**, Vol. 4, No. 4, pp. 479-510, 2000.
5. [J04] Karayannis C.G., Chalioris C.E., “*Strength of Prestressed Concrete Beams in Torsion*”, **Structural Engineering and Mechanics**, Vol. 10, No. 2, pp. 165-180, 2000.
6. [J05] Chalioris C.E., “*Experimental Study of the Torsion of Reinforced Concrete Members*”, **Structural Engineering and Mechanics**, Vol. 23, No. 6, pp. 713-737, 2006.
7. [J06] Chalioris C.E., “*Analytical Model for the Torsional Behaviour of Reinforced Concrete Beams Retrofitted with FRP Materials*”, **Engineering Structures**, Vol. 29, No. 12, pp. 3263-3276, 2007.
8. [J07] Chalioris C.E., “*Torsional Strengthening of Rectangular and Flanged Beams using Carbon Fibre-Reinforced-Polymers – Experimental Study*”, **Construction and Building Materials**, Vol. 22, No. 1, pp. 21-29, 2008.
9. [J08] Karayannis C.G., Chalioris C.E., Sirkelis G.M., “*Local Retrofit of Exterior RC Beam-Column Joints using Thin RC Jackets – An Experimental Study*”, **Earthquake Engineering and Structural Dynamics**, Vol. 37, No. 5, pp. 727-746, 2008.
10. [J09] Chalioris C.E., Favvata M.J., Karayannis C.G., “*Reinforced Concrete Beam-Column Joints with Crossed Inclined Bars under Cyclic Deformations*”, **Earthquake Engineering and Structural Dynamics**, Vol. 37, No. 6, pp. 881-897, 2008.
11. [J10] Chalioris C.E., Karayannis C.G., “*Effectiveness of the use of Steel Fibres on the Torsional Behaviour of Flanged Concrete Beams*”, **Cement and Concrete Composites**, Vol. 31, No. 5, pp. 331-341, 2009.
12. [J11] Chalioris C.E., Pourzitidis C.N., “*Rehabilitation of Shear-Damaged Reinforced Concrete Beams using Self-Compacting Concrete Jacketing*”, **ISRN Civil Engineering**, Vol. 2012, Article ID 816107, 12 pages, 2012.
13. [J12] Karayannis C.G., Chalioris C.E., “*Design of Partially Prestressed Concrete Beams based on the Cracking Control Provisions*”, **Engineering Structures**, Vol. 48, pp. 402-416, 2013.
14. [J13] Chalioris C.E., C.P. Papadopoulos, Pourzitidis C.N., Fotis D., Sideris K.K., “*Application of a Reinforced Self-Compacting Concrete Jacket in Damaged Reinforced Concrete Beams under Monotonic and Repeated Loading*”, **Journal of Engineering**, Vol. 2013, Article ID 912983, 12 pages, 2013.
15. [J14] Chalioris C.E., “*Steel Fibrous RC Beams subjected to Cyclic Deformations under Predominant Shear*”, **Engineering Structures**, Vol. 49, pp. 104-118, 2013.
16. [J15] Chalioris C.E., “*Analytical Approach for the Evaluation of Minimum Fibre Factor Required for Steel Fibrous Concrete Beams under Combined Shear and Flexure*”, **Construction and Building Materials**, Vol. 43, pp. 317-336, 2013.
17. [J16] Karayannis C.G., Chalioris C.E., “*Shear Tests of Reinforced Concrete Beams with Continuous Rectangular Spiral Reinforcement*”, **Construction and Building Materials**, Vol. 46, pp. 86-97, 2013.
18. [J17] Chalioris C.E., Karayannis C.G., “*Experimental Investigation of RC Beams with Rectangular Spiral Reinforcement in Torsion*”, **Engineering Structures**, Vol. 56, pp. 286-297, 2013.
19. [J18] Chalioris C.E., Thermou G.E., Pantazopoulou S.J., “*Behaviour of Rehabilitated RC Beams with Self-Compacting Concrete Jacketing – Analytical Model and Test Results*”, **Construction and Building Materials**, Vol. 55, pp. 257-273, 2014.
20. [J19] Providakis C.P., Karayannis C.G., Chalioris C.E., Favvata M.J., Angeli G.M., Papadopoulos N.A., “*Usage of PZTs for Damage Evaluation of Steel Reinforcing Bar*”, **Scholars Journal of Engineering and Technology**, Vol. 3, No. 1B, pp. 80-93, 2015.
21. [J20] Karayannis C.G., Voutetaki M.E., Chalioris C.E., Providakis C.P., Angeli G.M., “*Detection of Flexural Damage Stages for RC Beams using Piezoelectric Sensors (PZT)*”, **Smart Structures and Systems**, Vol. 15, No. 4, pp. 997-1018, 2015.
22. [J21] Chalioris C.E., Papadopoulos N.A., Angeli G.M., Karayannis C.G., Liolios Ast.A., Providakis C.P., “*Damage Evaluation in Shear-Critical Reinforced Concrete Beam using Piezoelectric Transducers as Smart Aggregates*”, **Open Engineering**, Vol. 5, No. 1, pp. 373-384, 2015.
23. [J22] Karayannis C.G., Chalioris C.E., Angeli G.M., Papadopoulos N.A., Favvata M.J., Providakis C.P., “*Experimental Damage Evaluation of Reinforced Concrete Steel Bars using Piezoelectric Sensors*”, **Construction and Building Materials**, Vol. 105, pp. 227-244, 2016.
24. [J23] Chalioris C.E., Karayannis C.G., Angeli G.M., Papadopoulos N.A., Favvata M.J., Providakis C.P., “*Applications of Smart Piezoelectric Materials in a Wireless Admittance Monitoring System (WiAMS) to Structures - Tests in RC Elements*”, **Case Studies in Construction Materials**, Vol. 5, pp. 1-18, 2016.
25. [J24] Chalioris C.E., K.E. Bantilas, “*Shear Strength of Reinforced Concrete Beam-Column Joints with Crossed Inclined Bars*”, **Engineering Structures**, Vol. 140, pp. 241-255, 2017.
26. [J25] Chalioris C.E., Kosmidou P.-M.K., Papadopoulos N.A., “*Investigation of a New Strengthening Technique for RC Deep Beams using Carbon FRP Ropes as Transverse Reinforcements*”, **Fibers**, Vol. 6, No. 3, article number 52, 18 pages, 2018.

27. [J26] Chalioris C.E., Panagiotopoulos T.A., “*Flexural Analysis of Steel Fibre Reinforced Concrete Members*”, **Computers and Concrete**, Vol. 22, No. 1, pp. 11-25, 2018.
28. [J27] Karayannis C.G., Kosmidou P.-M.K., Chalioris C.E., “*Reinforced Concrete Beams with Carbon-Fiber-Reinforced Polymer Bars - Experimental Study*”, **Fibers**, Vol. 6, No. 4, article number 99, 20 pages, 2018.
29. [J28] Kosmidou P.-M.K., Chalioris C.E., Karayannis C.G., “*Flexural/Shear Strength of RC Beams with Longitudinal FRP Bars - An Analytical Approach*”, **Computers and Concrete**, Vol. 22, No. 6, pp. 573-592, 2018.
30. [J29] Chalioris C.E., Kosmidou P.-M.K., Karayannis C.G., “*Cyclic Response of Steel Fiber Reinforced Concrete Slender Beams: An Experimental Study*”, **Materials**, Vol. 12, No. 9, article number 1398, 21 pages, 2019.
31. [J30] Chalioris C.E., Kytinou V.K., Voutetaki M.E., Papadopoulos N.A., “*Repair of Heavily Damaged RC Beams Failing in Shear using U-Shaped Mortar Jackets*”, **Buildings**, Vol. 9, No. 6, article number 146, 18 pages, 2019.
32. [J31] Chalioris C.E., Zapris A.G., Karayannis C.G., “*U-Jacketing Applications of Fiber-Reinforced Polymers in Reinforced Concrete T-beams against Shear - Tests and Design*”, **Fibers**, Vol. 8, No. 2, article number 13, 22 pages, 2020.
33. [J32] Chalioris C.E., Voutetaki M.E., Liolios Ang.A., “*Structural Health Monitoring of Seismically Vulnerable RC Frames under Lateral Cyclic Loading*”, **Earthquakes and Structures**, Vol. 19, No. 1, pp. 29-44, 2020.
34. [J33] Kytinou V.K., Chalioris C.E., Karayannis C.G., “*Analysis of Residual Flexural Stiffness of Steel Fiber-Reinforced Concrete Beams with Steel Reinforcement*”, **Materials**, Vol. 13, No. 12, article number 2698, 25 pages, 2020.
35. [J34] Kytinou V.K., Chalioris C.E., Karayannis C.G., Elenas A., “*Effect of Steel Fibers on the Hysteretic Performance of Concrete Beams with Steel Reinforcement—Tests and Analysis*”, **Materials**, Vol. 13, No. 13, article number 2923, 32 pages, 2020.
36. [J35] Ali A.H., Mohamed H.M., Chalioris C.E., Deifalla A., “*Evaluating the Shear Design Equations of FRP-Reinforced Concrete Beams without Shear Reinforcement*”, **Engineering Structures**, Vol. 235, article number 112017, 22 pages, 2021.
37. [J36] Chalioris C.E., Kytinou V.K., Voutetaki M.E., Karayannis C.G., “*Flexural Damage Diagnosis in Reinforced Concrete Beams Using a Wireless Admittance Monitoring System - Tests and Finite Element Analysis*”, **Sensors**, Vol. 21, No. 3, article number 679, 25 pages, 2021.
38. [J37] Golias E., Zapris A.G., Kytinou V.K., Kalogeropoulos G.I., Chalioris C.E., Karayannis C.G., “*Effectiveness of the Novel Rehabilitation Method of Seismically Damaged RC Joints Using C-FRP Ropes and Comparison with Widely Applied Method Using C-FRP Sheets – Experimental Investigation*”, **Sustainability**, Vol. 13, No. 11, article number 6454, 19 pages, 2021.
39. [J38] Deifalla A., Zapris A.G., Chalioris C.E., “*Multivariable Regression Strength Model for Steel Fiber-Reinforced Concrete Beams under Torsion*”, **Materials**, Vol. 14, No. 14, article number 3889, 24 pages, 2021.
40. [J39] Golias E., Zapris A.G., Kytinou V.K., Osman M., Koumtzis M., Siapera D., Chalioris C.E., Karayannis C.G., “*Application of X-shaped CFRP ropes for Structural Upgrading of Reinforced Concrete Beam-Column Joints under Cyclic Loading – Experimental Study*”, **Fibers**, Vol. 9, No. 7, article number 42, 15 pages, 2021.
41. [J40] Voutetaki M.E., Naoum M.C., Papadopoulos N.A., Sapidis G., Chalioris C.E., “*Cracking Diagnosis in Fibre Reinforced Concrete Cubes and Cylinders with Synthetic Fibres using a PZT-based Health Monitoring System*”, **Scholars Journal of Engineering and Technology**, Vol. 9, No. 9, pp. 140-151, 2021.
42. [J41] Asteris P.G., Naseri H., Hajihassani M., Kharghani M., Chalioris C.E., “*On the Mechanical Characteristics of Fiber Reinforced Polymer Concrete*”, **Advances in Concrete Construction**, Vol. 12, No. 4, pp. 271-282, 2021.
43. [J42] Voutetaki M.E., Naoum M.C., Papadopoulos N.A., Chalioris C.E., “*Cracking Diagnosis in Fiber-Reinforced Concrete with Synthetic Fibers using Piezoelectric Transducers*”, **Fibers**, Vol. 10, No. 1, article number 5, 23 pages, 2022.
44. [J43] Asteris P.G., Lourenço P.B., Roussis P.C., Adami C.E., Armaghani D.J., Cavaleri L., Chalioris C.E., Hajihassani M., Lemonis M.E., Mohammed A.S., Pilakoutas K., “*Revealing the Nature of Metakaolin-based Concrete Materials using Artificial Intelligence Techniques*”, **Construction and Building Materials**, Vol. 322, article number 126500, 18 pages, 2022.
45. [J44] Thomoglou A.K., Falara M.G., Gkountakou F.I., Elenas A., Chalioris C.E., “*Influence of Different Surfactants on Carbon Fiber Dispersion and the Mechanical Performance of Smart Piezoresistive Cementitious Composites*”, **Fibers**, Vol. 10, No. 6, article number 49, 22 pages, 2022.

National refereed journals (in Greek)

46. [GJ1] Karayannis C.G., Chalioris C.E., “*Torsional Behaviour of Reinforced Fibrous Concrete Elements*”, Journal “**Technika Chronika**”, Scientific Journal of Technical Chamber of Greece - A, Vol. 16, No. 1-2, pp. 53-67, 1996.
47. [GJ2] Karayannis C.G., Chalioris C.E., “*Repair of R/C Elements using Damaged by Seismic Excitations using Resin Injections*”, Journal “**Scientific Review Ktirio**”, Vol. C, pp. 31-38, 1998.
48. [GJ3] Karayannis C.G., Chalioris C.E., “*Experimental Investigation of Fiber – Concrete Behaviour in Direct Tension*”, Journal “**Scientific Review Ktirio**”, Vol. A, pp. 45-54, 2000.
49. [GJ4] Karayannis C.G., Chalioris C.E., “*Influence of Steel-Fibers on the Capacity of Flanged Beams in Torsion*”, Journal “**Technika Chronika**”, Scientific Journal of Technical Chamber of Greece - A, Vol. 20, No. 2, pp. 111-122, 2000.

Chapters in books - Articles in Journal Special Issues

50. [B1] Liolios Ang.A., Chalioris C.E., Liolios Ast.A., Radev S., Liolios K.A., “*A Computational Approach for the Earthquake Response of Cable-Braced Reinforced Concrete Structures under Environmental Actions*”, **Lecture Notes in Computer Science**, Vol. 7116, chapter in the book: “Large-Scale Scientific Computing”, Lirkov et al. (eds.), pp. 590-597, 2012.
51. [B2] Chalioris C.E., Pourzitidis C.N., Papadopoulos C.P., Fotis D., “*Flexural Rehabilitation of RC Beams using Self-Compacting Concrete Jacketing*”, **Advances in Civil Engineering and Building Materials**, CRC Press, Chang et al. (eds.), pp. 783-786, 2013.
52. [B3] Chalioris C.E., “*Optimum Dosage of Deformed Steel Fibres in Fibrous Concrete Beams Under Predominant Shear*”, **Advanced Materials Research**, Vol. 651, pp. 18-23, 2013.

53. [B4] Chalioris C.E., Liotoglou F.A., “*Tests and Simplified Behavioural Model for Steel Fibrous Concrete under Compression*”, **Advances in Civil Engineering and Building Materials IV**, CRC Press, Chang et al. (eds.), pp. 195-200, 2015.
54. [B5] Chalioris C.E., Tsioukas V.E., Karayannis C.G., “*Recording and Rehabilitation Procedures for Historic Masonry Buildings*”, **Computational Methods in Applied Sciences**, Vol. 37, chapter in the book: “Seismic Assessment, Behavior and Retrofit of Heritage Buildings and Monuments”, Psycharis et al. (eds.), pp. 341-364, 2015.
55. [B6] Chalioris C.E., Karayannis C.G., “*Application of Special Reinforcement Arrangements for RC Members under Torsion - Design Examples*”, **ACI SP-344: Examples for the Design of Reinforced and Prestressed Concrete Members Under Torsion**, pp. 93-110, 2020.

International conferences without proceedings (invited papers)

56. [IC1] Karayannis C.G., Chalioris C.E. (presenter), “*Smearred Crack Model for Plain Concrete in Torsion and Experimental Validation*”, **ACI-ASCE 445, Shear and Torsion Committee**, Toronto Convention “Torsion of Structural Concrete: Recent Advances”, Toronto, Canada, Oct. 2000.
57. [IC2] Karayannis C.G., Chalioris C.E. (both presenters), “*Torsion of Prestressed Concrete and Steel-Fiber Concrete Members*”, **ACI-445E Torsion of Structural Concrete Committee**, Structural Engineering Institute (SEI) of the ASCE “Structures Congress and Exposition”, Nashville, Tennessee, USA, May 2004.

International refereed conferences with proceedings

58. [C01] Economou C.M., Prinou C., Chalioris C.E., Karayannis C.G., “*Capacity Decrease of RC Joints due to Seismic Actions in the Curing Period*”, Proceedings of the **11th European Conference on Earthquake Engineering (11ECEE)**, Paris, France, Proceedings in electronic format, folder T2, paper name: ecocdo, Sept. 1998.
59. [C02] Karayannis C.G., Chalioris C.E. (presenter), “*Strengthening of Shear T-beams using Carbon FRP*”, Proceedings of the **1st International Conference on Concrete Repair**, St-Malo, Brittany, France, Vol. 2, pp. 775-782, July 2003.
60. [C03] Karayannis C.G., Sirkelis G.M., Chalioris C.E. (presenter), “*Repair of Reinforced Concrete T-beam – Column Joints using Epoxy Resin Injections*”, Proceedings of the **1st International Conference on Concrete Repair**, St-Malo, Brittany, France, Vol. 2, pp. 793-800, July 2003.
61. [C04] Chalioris C.E. (presenter), “*Shear Performance of RC Beams using FRP Sheets Covering Part of the Shear Span*”, Proceedings of the **1st International Conference on Concrete Repair**, St-Malo, Brittany, France, Vol. 2, pp. 809-816, July 2003.
62. [C05] Chalioris C.E. (presenter), “*Cracking and Ultimate Torque Capacity of Reinforced Concrete Beams*”, Proceedings of the **International Symposia “Celebrating Concrete: People and Practice”**, University of Dundee, Scotland, UK, Vol. Role of Concrete Bridges in Sustainable Development, pp. 109-117, Sept. 2003.
63. [C06] Karayannis C.G., Chalioris C.E. (presenter), “*Cyclic Testing of RC Connections in the Concrete Curing Period: Influence on the Final Capacity*”, Proceedings of the **International Symposia “Celebrating Concrete: People and Practice”**, University of Dundee, Scotland, UK, Vol. Role of Concrete in Sustainable Development, pp. 319-328, Sept. 2003.
64. [C07] Karayannis C.G., Chalioris C.E. (poster presentation), “*Experimental Investigation of the Contribution of Bonded C-FRP jackets to Shear Capacity of RC Beams*”, Proceedings of the **International Symposia “Celebrating Concrete: People and Practice”**, University of Dundee, Scotland, UK, Vol. Role of Concrete in Sustainable Development, pp. 689-696, Sept. 2003.
65. [C08] Karayannis C.G., Chalioris C.E. (presenter), Mavroeidis P.D., “*Shear Capacity of RC Rectangular Beams with Continuous Spiral Transversal Reinforcement*”, **WIT Transactions on Modelling and Simulation**, Vol. 41, pp. 379-386, 2005, Proceedings of the **12th International Conference on Computational Methods and Experimental Measurements (CMEM 2005)**, Malta, June 2005.
66. [C09] Chalioris C.E. (presenter), “*Behaviour Model and Experimental Study for the Torsion of Reinforced Concrete Members*”, **WIT Transactions on the Built Environment**, Vol. 85, pp. 459-468, 2006, Proceedings of the **3rd International Conference on High Performance Structures and Materials (HPSM 2006)**, Ostend, Belgium, May 2006.
67. [C10] Karayannis C.G., Sirkelis G.M., Chalioris C.E. (poster presentation), “*Seismic Performance of RC Beam-Column Joints Retrofitted using Light RC Jacket – Experimental Study*”, Proceedings of the **1st European Conference on Earthquake Engineering and Seismology (ECEES)**, Geneva, Switzerland, Proceedings in CD, paper number 136, Sept. 2006.
68. [C11] Chalioris C.E., Karayannis C.G., Favvata M.J., “*Cyclic Testing of Reinforced Concrete Beam-Column Joints with Crossed Inclined Bars*”, **WIT Transactions on Modelling and Simulation**, Vol. 46, pp. 623-632, 2007, Proceedings of the **13th International Conference on Computational Methods and Experimental Measurements (CMEM 2007)**, Prague, Czech Republic, July 2007.
69. [C12] Chalioris C.E. (presenter), “*Tests and Analysis of Reinforced Concrete Beams under Torsion Retrofitted with FRP Strips*”, **WIT Transactions on Modelling and Simulation**, Vol. 46, pp. 633-642, 2007, Proceedings of the **13th International Conference on Computational Methods and Experimental Measurements (CMEM 2007)**, Prague, Czech Republic, July 2007.
70. [C13] Chalioris C.E., “*Behavioural Model of FRP Strengthened Reinforced Concrete Beams under Torsion*”, Proceedings of the **1st Asian Pacific Conference on FRP in Structures (APFIS 2007)**, Hong Kong, Republic of China, Vol. I, pp. 111-116, Dec. 2007.
71. [C14] Chalioris C.E., Favvata M.J., Karayannis C.G., “*A New Method for the Seismic Rehabilitation of Old Exterior Reinforced Concrete Beam-Column Joints*”, Proceedings of the **7th European Conference on Structural Dynamics (Eurodyn 2008)**, Southampton, UK, Proceedings in electronic format, paper number E245, July 2008.
72. [C15] Tsioukas V., Alexandri V., Karayannis C.G., Chalioris C.E., “*Photogrammetry as a Tool to Record a Historic Building at Risk*”, Proceedings of the **22nd CIPA Symposium**, Kyoto, Japan, Proceedings in electronic format, paper number 44, Oct. 2009.

73. [C16] Chalioris C.E., Sfiri E.F., “*Shear Performance of Steel Fibrous Concrete Beams*”, **Procedia Engineering**, Vol. 14, pp. 2064-2068, 2011, Proceedings of the **12th East Asia-Pacific Conference on Structural Engineering and Construction (EASEC-12)**, Hong Kong, Republic of China, Jan. 2011.
74. [C17] Liolios Ang.A., Chalioris C.E., Liolios K.A., “*A Numerical Approach for the Seismic Analysis of Reinforced Concrete Structures Environmentally Damaged and Cable-strengthened*”, Proceedings of the **3rd Serbian (28th Yu) Congress on Theoretical and Applied Mechanics**, Vlasina lake, Serbia, paper number C-29, pp. 590-597, July 2011.
75. [C18] Voutetaki M.E., Providakis C.P., Chalioris C.E., “*FRP Debonding Prevention of Strengthened Concrete Members under Dynamic Load using Smart Piezoelectric Materials (PZT)*”, Proceedings of the **15th European Conference on Composite Materials (ECCM15)**, Venice, Italy, Proceedings in electronic format, paper number 2170, June 2012.
76. [C19] Chalioris C.E., Pourzitidis C.N., “*Self-Compacting Concrete Jacketing – Tests and Analysis*”, **American Applied Sciences Research Institute (AASRI) Procedia**, Vol. 3, pp. 624-629, 2012, Proceedings of the **AASRI Conference on Modelling, Identification and Control (MIC 2012)**, Hong Kong, Republic of China, Dec. 2012.
77. [C20] Chalioris C.E. (presenter), Favvata M.J., Alexandri V.G., Karayannis C.G., “*Rehabilitation of a Partially Collapsed Masonry Traditional Tobacco Warehouse of the late 19th Century*”, Proceedings of the **4th ECCOMAS Thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering (COMPDYN 2013)**, Kos, Greece, Proceedings in electronic format, paper number 1596, June 2013.
78. [C21] Chalioris C.E. (presenter), Tsioukas V.E., Favvata M.J., Karayannis C.G., “*Recording Historic Masonry Buildings using Photogrammetry - Two Case Studies*”, Proceedings of the **4th ECCOMAS Thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering (COMPDYN 2013)**, Kos, Greece, Proceedings in electronic format, paper number 1597, June 2013.
79. [C22] Karayannis C.G., Chalioris C.E. (presenter), “*Structural Upgrading of a 3-storey Heritage Structure of 1925 in Thessaloniki*”, Proceedings of the **4th ECCOMAS Thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering (COMPDYN 2013)**, Kos, Greece, Proceedings in electronic format, paper number 1598, June 2013.
80. [C23] Providakis C.P., Angeli G.M., Favvata M.J., Papadopoulos N.A., Chalioris C.E. (presenter), Karayannis C.G., “*Detection of Concrete Reinforcement Damage using Piezoelectric Materials - Analytical and Experimental Study*”, **World Academy of Science, Engineering and Technology, International Journal of Civil, Architectural, Structural and Construction Engineering**, Vol. 8, No. 2, pp. 197-205, 2014, Proceedings of the **International Conference on Civil, Environmental and Structural Engineering (ICCESE 2014)**, Barcelona, Spain, Feb. 2014.
81. [C24] Chalioris C.E., Providakis C.P., Favvata M.J., Papadopoulos N.A., Angeli G.M., Karayannis C.G., “*Experimental Application of a Wireless Earthquake Damage Monitoring System (WiAMS) using PZT Transducers in Reinforced Concrete Beams*”, **WIT Transactions on The Built Environment**, Vol. 152, pp. 233-243, 2015, Proceedings of the **10th International Conference on Earthquake Resistant Engineering Structures (ERES 2015)**, Opatija, Croatia, June-July 2015.
82. [C25] Liolios Ang.A., Chalioris C.E., “*Reinforced Concrete Frames Strengthened by Cable Elements under Multiple Earthquakes: A Computational Approach Simulating Experimental Results*”, Proceedings of the **8th GRACM International Conference on Computational Mechanics**, Volos, Greece, July 2015.
83. [C26] Voutetaki M.E., Papadopoulos N.A., Chalioris C.E., Providakis C.P., “*NDT for Damage Diagnosis in Shear-critical Concrete Beams using External PZTs and a New Wireless Monitoring System (WiAMS)*”, Proceedings of the **6th International Conference on Concrete Repair**, Thessaloniki, Greece, pp. 187-194, June 2016.
84. [C27] Chalioris C.E., Argiriou C.A., “*Shear Strengthening of Reinforced Concrete T-beams with EB-FRP Sheets*”, Proceedings of the **6th International Conference on Concrete Repair**, Thessaloniki, Greece, pp. 479-486, June 2016.
85. [C28] Chalioris C.E., Kosmidou P.-M.K., Panagiotopoulos T.A., Karayannis C.G., “*Flexural and Cracking Behaviour of Concrete Beams Reinforced with FRP Bars*”, Proceedings of the **6th International Conference on Concrete Repair**, Thessaloniki, Greece, pp. 487-492, June 2016.
86. [C29] Liolios Ang.A., Efthymiopoulos P.N., Mergoupis T.A., Rizavas V.D., Chalioris C.E., “*Reinforced Concrete Frames Strengthened by Tension-tie Elements under Cyclic Loading: Experimental Investigation*”, Proceedings of the **6th ECCOMAS Thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering (COMPDYN 2017)**, Rhodes, Greece, Proceedings in electronic format, paper number C18197, June 2017.
87. [C30] Liolios Ang.A., Chalioris C.E., “*Reinforced Concrete Frames Strengthened by Tension-tie Elements under Cyclic Loading: A Computational Approach Simulating Experimental Results*”, Proceedings of the **6th ECCOMAS Thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering (COMPDYN 2017)**, Rhodes, Greece, Proceedings in electronic format, paper number C18195, June 2017.
88. [C31] Karayannis C.G., Golias E., Chalioris C.E., “*Local FRP-Retrofitting of Exterior Reinforced Concrete Beam-Column Joints under Cyclic Lateral Loading*”, Proceedings of the **16th European Conference on Earthquake Engineering (16ECEE)**, Thessaloniki, Greece, Proceedings in electronic format, paper number 11174, June 2018.
89. [C32] Naoum M.C., Voutetaki M.E., Papadopoulos N.A., Chalioris C.E., “*Detection of Damage in Fiber Reinforced Concrete using Piezoceramic Transducers and Electromechanical Impedance (EMI) Method*”, Proceedings of the **11th International Conference on Advanced Materials Research (ICAMR 2021) - 5th International Conference on Civil and Building Materials (ICCBM 2021)**, Singapore, Proceedings in electronic format, paper number A2015, January 2021.
90. [C33] Golias E., Katsimene S., Ziavra E., Kirtsonis K., Chalioris C.E., Karayannis C.G., “*Application of C-FRP Sheets for Structural Repairing of RC Beam-Column Connections Damaged under Cyclic Loading – Experimental Study*”, Proceedings of the **8th ECCOMAS Thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering (COMPDYN 2021)**, Athens, Greece, Proceedings in electronic format, paper number CD21_19619, June 2021.

International conferences without proceedings (2 pages papers)

91. [CC1] Kosmidou P.-M.K., Karayannis C.G., Chalioris C.E., “*Tests and Analysis of Reinforced Concrete Beams with FRP bars*”, **25th Annual International Conference on Composite/Nano Engineering (ICCE-25)**, Rome, Italy, July 2017.
92. [CC2] Chalioris C.E., Papadopoulos N.A., Panagiotopoulos T.A., Kosmidou P.-M.K., “*Shear Strengthening of Reinforced Concrete Deep Beams without Stirrups using Carbon Fibre Rope as Transverse Link Reinforcement*”, **25th Annual International Conference on Composite/Nano Engineering (ICCE-25)**, Rome, Italy, July 2017.
93. [CC3] Papadopoulos N.A., Voutetaki M.E., Chalioris C.E., “*Damage Detection in Shear-Critical Reinforced Concrete Beams using a Wireless Admittance Monitoring System (WiAMS)*”, **25th Annual International Conference on Composite/Nano Engineering (ICCE-25)**, Rome, Italy, July 2017.
94. [CC4] Golias E., Wittemann K., Chalioris C.E., Karayannis C.G., “*Cyclic Response of Shear-deficient RC Beam-Column Joints Strengthened with additional Transverse Steel Bars*”, **26th Annual International Conference on Composite/Nano Engineering (ICCE-26)**, Paris, France, July 2018.
95. [CC5] Golias E., Zapris A.G., Kytinou V.K., Chalioris C.E., Karayannis C.G., “*Cyclic Response of Shear-deficient RC Beam-Column Joints Strengthened with additional CFRP Ropes*”, **28th Annual International Conference on Composite/Nano Engineering (ICCE-28)**, Prague, Czech Republic, July 2020.

and 28 papers in National conferences (24 in Greek and 4 in English) and 4 articles in news-letters.

Citations (May 2022)

- over 2500 citations (self-citations and citations from co-authors are excluded) are known in refereed journals, books, research reports (in USA Institutes and Universities), refereed conference proceedings and dissertations (dissertations in Democritus University of Thrace are excluded).
- **SCOPUS:** **h-index: 27**, over 1800 citations (Author ID: 6507070963).
 h-index: 26, over 1500 citations (excluding self-citations of all co-authors).
- **Google Scholar:** **h-index: 31**, over 2500 citations.