

Theodoros C. Rousakis

Ph.D., M.Sc., Civil Engineer

Assistant Professor in Laboratory of Reinforced Concrete and Seismic
Resistant Structures,

Engineering Structures Section,

Civil Engineering Department,

Engineering Faculty

Democritus University of Thrace (D.U.Th.)

CURRICULUM VITAE

Xanthi, March 2019

Specialism: FRPs in Construction. Repair and Strengthening of Concrete Structural Members with Composite Materials (FRP, FR, Hybrid). 3D Finite Element Analysis. Pre-seismic and Post-seismic Control of Structures, Rapid Visual Screening of the Vulnerability of Buildings, Reinforced Concrete Members under Fatigue Loading or with Steel Corrosion, Assessment – Analysis and Strengthening and Repair.

(site <http://utopia.duth.gr/~trousak/>)

Personal Data

Date of birth: 10-2-1976

Place of birth: Agia Triada Thessaloniki, Municipality of Thermaikos

Married since 2003. Father of one daughter.

Education – Research and Academic Positions

- High School graduation (1993), Neoi Epivatess Thessaloniki (with grade 17.9 / 20)
- During 5 year diploma in Civil Engineering (1994-1999) he obtained a distinction scholarship (5th higher grade in 180 students at the 3rd year of undergraduate studies) from Institute of Greek State Grants (IKY). He supervised the construction of 7 multi-storey buildings in Xanthi. Diploma thesis in Use of FRP in Construction (Grade, ‘Excellent’).
- Master in Structural Engineering entitled “New Materials and Technologies in Design of Reinforced Concrete Structures” with a state scholarship (1999-2000). Master Thesis in FRP confined concrete conducting experiments and proposing a plasticity model (co-author with his supervisor Professor A.I. Karabinis of one journal paper and two conference papers, based on that work). Teaching assistance was assigned from his supervisor.
- Participation in 2 competitive European research programs within the framework of TMR Network ConFibreCrete «Development of Guidelines for the Design of Concrete Structures, Reinforced, Prestressed or Strengthened with Advanced Composites» as a visiting researcher (2000-2001), ‘Project assistant’ Chalmers University of Technology (Sweden) under the supervision of Professor R. Tefpers. Also, he participated in the two year (2005-2006) research program “Strengthening of cylinders with carbon FRPs” of Chalmers University of Technology (Göteborg, Sweden) and Polymer Mechanics Institute (PMI Riga – Latvia). In above researches he had the chance to collaborate among else with young researchers from Latvia as well as from Italy. Three conference papers and three journal papers in which he was co-author were based on that collaborations.
- During his stay at Chalmers he participated as young researcher in the European Union Network for the Training and Mobility of Researchers (TMR) CONFIBRECRETE, aiming at the ‘Development of Guidelines for the Design of Concrete Structures, Reinforced, Prestressed or Strengthened with Advanced Composites’ with the team of Chalmers University of Technology (one of the 11 teams from 9 different European countries) under the supervision of Professor R. Tefpers.
- As PhD Candidate he defended his PhD thesis in October 2005 entitled ‘Mechanical Behaviour of FRP confined Concrete by FRP Materials’ and got PhD degree with grade ‘Excellent’ under the supervision of Professor A.I. Karabinis. Teaching assistance was assigned from his supervisor from 2001 – 2003.
- Elected (after the standard election procedure followed for full-time Professors) as a full-time Special & Lab Teaching Staff Civil Engineer of the Reinforced Concrete Laboratory of the Civil Engineering Department of The Engineering Faculty of D.U.Th. (hired from 7/2003 – 9/2009).

Teaching of courses in Civil Engineering Department were assigned and assistance in supervision of Diploma and Master Thesis.

- Hired as part-time Lecturer in Architectural Engineering Department of D.U.Th. (3/2006 – 9/2009) to co-teach reinforced concrete and seismic design courses.
- Elected (after the standard election procedure followed for full-time Professors) as full-time Lecturer of the Reinforced Concrete Laboratory of the Engineering Structures Section of the Civil Engineering Department of The Engineering Faculty of D.U.Th. (hired 9/2009 – 12/2014) with full teaching assignments in 4th and 5th year of undergraduate level and in Master program. He has supervised Diploma and Master Theses.
- Elected (after the standard election procedure followed for full-time Professors) as full-time Assistant Professor of the Reinforced Concrete Laboratory of the Engineering Structures Section of the Civil Engineering Department of The Engineering Faculty of D.U.Th. (hired 12/2014 – 8/2018) with full teaching assignments in 4th and 5th year of undergraduate level and in Master program.
- Elected (after the standard election procedure followed for full-time Professors) as full-time **Permanent** Assistant Professor of the Reinforced Concrete Laboratory of the Engineering Structures Section of the Civil Engineering Department of The Engineering Faculty of D.U.Th. (hired 8/2018 – present) with full teaching assignments in 4th and 5th year of undergraduate level and in Master program.
- In total, he has supervised more than 43 Diploma and 4 Master Theses.

Additional specialization – continuous education

2003(/5): Participation in seminar – course: *fib* Course “Strengthening with Externally Bonded FRP Reinforcement – Behaviour, Design and Applications” in Athens, 4-5 of May 2003.

2010(/10): Participation in webinar within the framework of ACI FALL Covention 2010, Pittsburgh, entitled «ACI Sustainable Design with Concrete Part 2».

2011(19/3): Participation in seminar entitled «Design of Concrete Structures based on Eurocodes» by Technical Chamber of Greece, SMPE and OASP, in Kavala, Greece.

2011(19/10):): Participation in seminar entitled “Retrofit of Reinforced Concrete Structures based on ENI504 (FEK 1100/21-7-2010)” by Technical Chamber of Greece, in Thrace, Komotini, Greece.

2011(17/12): Participation in seminar entitled «New retrofit Code (KAN.EPE) assessment of structures and interventions» by Technical Chamber of Greece and OASP, in Kavala, Greece.

2013(19/4): Participation in seminar entitled “Pathology – Durability of Reinforced Concrete and Retrofit” by EPES and Technical Chamber of Greece and Greek Section of International Association for Bridge and Structural Engineers (IABSE) in Thessaloniki, Greece.

2014(8/1): Participation in webinar organized by the International Institute for FRP in Construction, IIFC, entitled «RC beam strengthened for flexure», E. Martinelli , University of Salerno, 08 January 2014.

2014(5/8): Participation in webinar organized by ACI, entitled « Design and Construction of Externally Bonded Fabric-Reinforced Cementitious Matrix (FRCM) Systems » by A. Nanni.

2014(2/9): Participation in webinar organized by ACI, entitled «Background and Application of ACI 437.2-13: Code Requirements for Load Testing of Existing Concrete Structures».

- 2014(16/10): Participation in webinar organized by ANSYS UK entitled «Simulating Composite Products with ANSYS».
- 2015(8/1): Participation in webinar organized by International Institute for FRP in Construction, IIFC, entitled « FRP material for strengthening of structures in the field of construction, mechanical properties and bond», by *Professor Ferrier*, University Lyon, 08 January 2015. Also, in RC beam strengthened for flexure, by *Professor Martinelli*, University of Salerno, Italia, 14 January 2015, RC beam strengthened for shear, by *Professor Barros*, University of Minho, Portugal, 26 February 2015, Field applications of FRP in bridges in Australia, by *Professor Riadh Al-Mahaidi*, Swinburne University of Technology Australia, Development of Standard Design Equations for Pultruded GFRP Members Subject to Compression, by *Professor Harries*, University of Pittsburgh, USA, March 2015, 30 of March, Durability of FRP, by *Professor Benmokrane*, University of Sherbrooke, Canada, 10 June 2015, Seismic behavior of structures Strengthened by FRP, by *Professor Triantafillou*, University of Patras, Greece, June 2015.
- 2015(18/6) - : Participation in numerous webinars organized by SIMULIA (Abaqus, 3d Experience etc), ANSYS (Workbench, ADPL) or CIVILFEM in topics of analysis of members and structures with 3dimensional finite elements.
- 2017(27/2-16/4): Philosophy course ΦΛΣ2: Aristotle' s Ethics (Professor P. Kontos, University of Patras) provided by the Center for Open Web Courses, Mathesis, PEK, ITE (grade 98%).
- 2017(1/5-11/6): Computer programming course HY1.1: Introduction to Python (Professor N. Avouris, University of Patras) provided by the Center for Open Web Courses, Mathesis, PEK, ITE (grade 100%).

Administrative work (I)

As a full-time Special & Lab Teaching Staff he participated with vote in the general assembly of the Civil Engineering Department and its administrative council. Also his duty was to participate in the general assembly of the engineering structures section and of the reinforced concrete laboratory since 2003. As Lecturer (since 2009) he was a member of the general assembly of the Civil Engineering Department (2011-present) and of the general assembly of the engineering structures section. He was substitute member of the Special Interdepartmental Committee of the Postgraduate Program “New Material and Technologies in Design of RC Projects” from 2013 -2018. He has been a member of committees concerning the preparation of proposals for Department equipment, evaluation of equipment, evaluation and ranking of candidates for staff or of candidates for the Engineering Structures Master Program since 2003, specifications for reinforced concrete lab equipment, etc. He has participated in the preparation and writing of the proposal of the Civil Engineering Department of DUTH for the Program of Practical Training (work experience) of Students between 2012-2015. He was member of the Coordinating Committee for the postgraduate program ““New Material and Technologies in Design of RC Projects”” between 2017-2018. He was member of the committee for the writing of the proposal for the new Interuniversity Postgraduate Program “New Materials and Technologies in the Design of Engineering Structures” for 2018-2019. He was substitute member of the Special Interuniversity Committee for the Postgraduate Program “New Materials and Technologies in the Design of Engineering Structures” for 2018-2019. He was member of the Committee for the selection and evaluation of candidates for the postgraduate program “New Materials and Technologies in the Design of Engineering Structures” for 2018-2019. Substitute external member of 2 Electoral Bodies for the selection of Assistant Professors in AUTH.

Teaching Experience (II)

Assignment of the teaching assistance of several courses in 4th year:

- Reinforced Concrete Structures Ib from 1999-2009.

and 5th year:

- Reinforced Concrete Structures Ic for 2008-2009,
- Reinforced Concrete and Prestressed Bridges 2006-2009,

of undergraduate level at the Civil Engineering Department in D.U.Th.

Assignment of co-teaching of several courses in 4th year:

- Reinforced Concrete Structures Ib from 2009-2010 and from 2016-present.
- Masonry Structures from 2010-present,
- Reinforced Concrete Structures II from 2015

and 5th year:

- Reinforced Concrete Structures Ic from 2009-present,
- Reinforced Concrete and Prestressed Bridges 2009-present,
- Assessment and Retrofit of Reinforced Concrete Structures 2010-present
- Design of Engineering Structures with Computational Methods 2013-present

of undergraduate level at the Civil Engineering Department in D.U.Th.

Participation in the postgraduate program “New Materials and Technologies in Design of Reinforced Concrete Structures”. Co-teaching of the postgraduate courses:

- Seismic Design and Use of New Materials in Reinforced Concrete Bridges (2010-2013) and
- Behaviour and Design of Reinforced Concrete Structural Members with Synthetic Reinforcement’ (2013-2015)

was assigned.

Also he is teaching the postgraduate course:

11. Research Methodology in Reinforced Concrete (2011-2018).

Also he is teaching the postgraduate courses:

12. Research Methodology in Strengthening and Repair of RC Structures (2018-2019).
13. Strengthening and Repair with Advanced Composites and Hybrid Techniques for Resilience Upgrade of RC Structures Using Finite Element Software (ANSYS).

Finally two courses on Reinforced Concrete Design of the 3rd year of Architectural Engineering Department were taught (2002-2009). In all above courses he supervises student projects that are obligatory to fulfil and include Finite Element Analyses of Structures (1D, 2D or 3D). Undergraduate courses include elastic and inelastic 3D analysis of structures (buildings and bridges – elastic analysis of 3D structures with 1D or 2D finite elements) with advanced softwares. Undergraduate course Design of Engineering Structures with Computational Methods includes the use of different softwares for the design of new or existing concrete buildings with professional softwares according to Eurocode 2 and 8 – elastic or inelastic analysis of 3D structures with 1D finite elements), RESPONSE 2000 for the analysis of RC sections and

members (pushover) with Modified Compression Field Theory for Axial load - Flexure – Shear interaction, Seismostruct or SAP for the pushover analysis or time-history analysis of as-built and retrofitted structures (inelastic analysis of 3D structures with 1D finite elements and discretization of sections in fibers). Thus, there is a project with inelastic analysis in section, member and structure level. In the post-graduate level and especially in the course of Research Methodology in Reinforced Concrete, lessons include the introduction to 3D non associative Drucker-Prager plasticity theory for confined concrete as well as Damage plasticity models in order to construct, analyse and assess the analytical behaviour of 3D FE RC columns and beams strengthened with FRPs or not.

Thesis supervising (IIa)

He has assisted the supervision of more than 30 Diploma theses and Master theses until 2009 (Supervisor Professor A.I. Karabinis). After elected as Lecturer in 2009 he has been the supervisor of more than 43 Diploma Theses and 4 Master Theses in the area of strengthening with composites and new composite reinforcements and techniques. Based on the collaboration with numerous undergraduate and postgraduate students, several common papers were published in journals or conferences, among others with: Manolitsi G., Rakitzis T., Gronti Z., Tourtouras I., Triantafyllou G., Saridaki M., Mavrothalassitou S., Charalambidi B., Panagiotakis G., Archontaki E., Kostopoulos A., Anagnostou E., Fanaradelli T., Gkouma M., Kardala M., Moutziz I., Stylianoy M., Tsoukas S., Rouka D., Kaloudaki A., Lisseli S., Mellios N., Samprakou V., Visviki E., Georgiadis N., Pavlou D., Vogdanos D.

He is supervisor of the Doctoral Thesis of Mrs Theodora Fanaradelli-Mariola in the field of “Reinforced concrete columns subjected to repeated seismic axial load, strengthened with transverse composites and alternative techniques”. Mrs Fanaradelli has received a **grant within the framework of the action “Support of Human Research Resources Through Doctoral Research” from the Foundation for State Scholarships (IKY) to conclude her Doctoral Thesis.**

He is supervisor of the Doctoral Thesis of Mrs Evgenia Anagnostou in the field of “Seismic strengthening with composites and alternative techniques, of columns with seismic predamage”

He was member of the consulting committee for the doctoral studies of the PhD candidate Mrs Garyfallia Triantafyllou in the field of “strengthening of reinforced concrete members” (Supervisor Professor Athanasios Karabinis). She has concluded successfully her PhD Thesis during 2018 entitled “Repair and Strengthening of Corroded Reinforced Concrete Elements With Composites”, having received grant from IKY/Siemens.

He was member of the final examining committee of the following PhD Theses by:

- Mrs Barbara Charalambidi entitled “Behavior of Concrete Members Strengthened with Composite Material Laminates”, supervised by Professor A. Karabinis.
- Mr Ioannis Kavvadias entitled “Investigation of the dynamic response of historical monuments, rocking under seismic excitation and of the contribution of friction bearings to their Seismic Resistance”, supervised by Professor L. Vasiliadis.
- Mrs Garyfallia Triantafyllou entitled “Repair and Strengthening of Corroded Reinforced Concrete Elements With Composites”, supervised by Professor A. Karabinis.

Professional work (III)

1999: Supervision of the construction of 7 multi-storey buildings in Xanthi during his 5-month internship program as undergraduate student of Civil Engineering Department (DUTH).

2000(/02): Full license for Civil Engineering Profession through examination in the Technical Chamber of Greece (February 2000). Member of Technical Chamber of Greece reg.no: 84578. Member of Technical Chamber of Greece reg.no: 84578. Member of the Association of Greek Civil Engineers,

2000(/8) – : Participation in two competitive European research projects, working as 'Project assistant' (principal researcher) Chalmers University of Technology (Sweden) under the supervision of Professor R. Tepfers. Participation in two competitive European Networking-Research projects, COST Action TU1207 and TU1406. Principal researcher in ten Greek projects (assigned by DUTH, Organization of School Buildings, Technical Chamber of Greece or private companies).

2002(/2) – 2002(/7): Special design projects and building projects of total budget 2.295.489,56 Euros and supervision of building projects of total budget: 331.181,12 Euros 732 Directorate of Military Projects (Greek Army).

Consultancy as invited expert

2007(/6): Assessment of DUTH buildings in Orestiada. Assigned by DUTH in committee of experts.

2012(/10): Assessment of Reinforced Concrete Bridge in Peteinos, Xanthi after damage of multiple girders caused by vehicular impact. Assigned by Regional Division of Xanthi in committee of experts.

2015(/3): Assessment of Educational Reinforced Concrete Building in Kimmeria, Xanthi after damages in non-structural elements. Assigned by DUTH Rector in committee of experts.

2015(/10): Assessment of Educational Stone-Brick Masonry Building in Xanthi after damages in bearing walls. Assigned by DUTH Senate in committee of experts.

Participation in evaluation committees

2014(/5): Invited evaluator of the candidate Teachers of the academic years 2014-2017 for module "Seismic damage, Repair and Strengthening of Structures" (SMA61) of the Postgraduate Program of Studies "Earthquake Engineering and Seismic-Resistant Structures" of the Hellenic Open University, Patras, Greece.

2014(/6): Invited examiner of the candidate Graduate Civil Engineers, for the Greek regulatory body for Civil Engineering profession (Chartered Engineers) on Wednesday 25th of June 2014 in Komotini.

2014(/9): Invited evaluator of research proposals within the framework of European Research Network ERA-MIN.

2015(/6) and 2015(/11) and 2016(/2) and 2016(/6) and 2017(/2): Invited examiner of the candidate Graduate Civil Engineers, for the Greek regulatory body for Civil Engineering profession (Chartered Engineers) in Komotini and in Kavala, Greece.

2016(/9): Invited evaluator of research proposals assigned by General Secretariat of Research and Technology (GSRT), Ministry of Education, Research and Religious Affairs.

2019(/1)- : Evaluator, after invitation by the Rector of University of Porto, QS Intelligence Unit (QSIU), for the international University ranking system QS World University Rankings.

2019(/3) - : Invited evaluator of research proposals for EDBM, ESPA 2014-2020.

Participation in research projects (IV)

2000(/8) – 2001(/1): Hired as Project Assistant of Professor Ralejs Tepfers in Chalmers University of Technology (Sweden) within the framework of TMR Network ConFibreCrete “Development of Guidelines for the Design of Concrete Structures, Reinforced, Prestressed or Strengthened with Advanced Composites”. He was the main researcher and author of the research report, supervised by Professor Tepfers. The research project concerned the investigation of the experimental behaviour of FRP confined concrete under axial monotonic and repeated load-unload-reload compression. The plain concrete strengths varied from 25-82 MPa while 3 different carbon FRP materials were used. Prestressed (active) confinement was applied using carbon filament. The funding of this competitive research project was by the EU, and the grant reached a total of 12000 Euros.

2001(/9) – 2001(/12): Participation in the research project in Riga Institute of Polymer Mechanics (PMI) Latvia, within the framework of TMR Network ConFibreCrete “Development of Guidelines for the Design of Concrete Structures, Reinforced, Prestressed or Strengthened with Advanced Composites”. The project further advanced the former project with the collaboration of Chalmers University. The funding of this competitive research project was by the EU.

2002(/4) – 2003(/4) & 2004(1/5 – 30/5): Hired as Principal Researcher from the Research Committee of DUTH within the framework of the project ‘Preseismic Assessment of Structures’ with assignment of the project ‘Collection and Elaboration of first level preseismic assessment’. Project leader Professor A. Karabinis. He conducted rapid visual screening of all University structures (Xanthi, Komotini, Alexandroupolis) based on FEMA 154 procedure modified and improved for use in Greek structures. The method was also applied in 687 structures hit from major Athens 1999 earthquake that also included collapsed structures. He made a database for further elaboration and estimation of vulnerable buildings. A pushover analysis of a University reinforced concrete structure was conducted according to ATC-40/1996 procedure in order to compare the results of detailed assessment with the ones from RVS method and evaluate the limit score. The total grant reached 11700 Euros.

2004(23/9) – 2005(23/1): Hired as Principal Researcher by the Technical Chamber of Greece as a member of a research group of the “National Program for the Seismic Strengthening of Existing Structures (EPIANTYK)” with objective: census of existing buildings and assessment of the seismic vulnerability and seismic hazard of buildings in the town of Xanthi (Residential area, Project with Project Leader Professor A. Karabinis). Total grant 500 Euros.

2005(1/1) – 2006(31/12): Participation in the research project in Riga Institute of Polymer Mechanics (PMI) entitled “Strengthening of concrete cylinders with carbon FRPs”. The project was in collaboration with Chalmers University of Technology. He participated as member of the research team coming from DUTH, PMI, Chalmers and Lecce.

2005(26/1) – 2005(25/4) and 2005(24/10) – 2005(31/12): Hired by the Research Committee of DUTH as a principal member of research group under the supervision of Professor A. Karabinis in the research project ‘Application of the 1st phase of the research program for the pre-seismic control of school buildings that were designed and constructed without seismic code in the counties of Xanthi’ assigned by the Organization of School Buildings (OSK). The assigned task was the in-situ inspection and fill in of the RVS data-sheets for the structural and non-structural vulnerability of school buildings. Another demanding task was the decision of direct structural retrofit or of direct demolition of dangerous non-structural elements for each building

2005(10/6) – 2006(28/2): Hired by the Research Committee of DUTH as a principal member of research group under the supervision of Professor A. Karabinis in the research project ‘Application of the 1st phase of the research program for the pre-seismic control of school buildings that were designed and constructed without seismic code in the counties of Kavala, Evros, Rodopi’ assigned by the Organization of School Buildings (OSK). The assigned task was the in-situ inspection and fill in of the RVS data-sheets for the structural and non-structural vulnerability of school buildings. Another demanding task was the decision of direct structural retrofit or of direct demolition of dangerous non-structural elements for each building

2006(1/3) – 2006(30/9): Hired by the Research Committee of DUTH as a principal member of research group under the supervision of Professor A. Karabinis in the research project ‘Application of the 1st phase of the research program for the pre-seismic control of school buildings that were designed and constructed without seismic code in the counties of Serres and Drama’ assigned by the Organization of School Buildings (OSK). The assigned task was the in-situ inspection and fill in of the RVS data-sheets for the structural and non-structural vulnerability of school buildings in 7 counties of Greece including the whole Thrace and a part of East Macedonia. Another demanding task was the decision of direct structural retrofit or of direct demolition of dangerous non-structural elements for each building. He traced the buildings of that category and coordinated the team for the in-situ visits and the preparation of RVS data-sheets. The total grant for the whole OSK project surpassed 15.000 Euros.

2006(25/10) – 2007(24/10): Hired by the Research Committee of DUTH as a principal member of research group under the supervision of Professor A. Karabinis in the research project ‘Preparation of guidelines and evaluation of the results from the assessment of seismic capacity of existing buildings owned by GTO (OTE) properties SA (Phase A)’” assigned by OTE properties SA.

2008(8/4) – 2008(8/10): Hired by the Research Committee of DUTH as a member of research group under the supervision of Professor A. Karabinis in the research project ‘ Investigation of the causes and evaluation of research results concerning the burn of the new factory of Michas AEBE in Levadia’ assigned by Michas AEBE.

2012(/5): Hired by the Research Committee of DUTH as a member of research group under the supervision of Professor A. Karabinis in the research project ‘Laboratory tests of concrete structural members, structures and materials’ with objective proposals for the experimental investigation of the efficiency of concrete elements’ strengthening with FRPs, assigned by Emvolo Thessalonikis ATE. Budget of 1845 Euros.

2013(/6) – 2017(/6): Participation in the TUD COST (European Cooperation in Science and Technology) Action TU1207: Next Generation Design Guidelines for Composites in Construction, as member of the Management Committee. The Action starts from June 2013 and aims to: coordinate European research in the field; develop and maintain a critical mass of researchers; offer a link between academia and industry; and develop a new generation of design guidelines based on European Standards. http://www.cost.eu/domains_actions/tud/Actions/TU1207?

2015(/4) – 2019(/4): Participation in the TUD COST (European Cooperation in Science and Technology) Action TU1406: Quality specifications for roadway bridges, standardization at a European level (BridgeSpec), as substitute member of the Management Committee. The Action starts from April 2015 and aims to: to bring together, for the first time, both research and practicing community in order to accelerate the establishment of a European guideline in this subject. It will be also analysed new indicators related to sustainable and economic performance of roadway bridges. http://www.cost.eu/domains_actions/tud/Actions/TU1406?

2015(/6) - 2015(/11): Participation in the research project in Alexandroupolis, Greece entitled “Investigation of the structural system and retrofit proposal for the Education buildings in Alexandroupolis, Greece”.

2019(/2) – : Research collaboration with Slovenian National Building and Civil Engineering Institute Slovenia (ZAG) και Cracow University of Technology CUT, Poland in the field of **“In- and out-of-plane tests of masonry-infilled RC frames with flexible joints”**.

Research project leader (IV.1)

Project leader in one ongoing projects and three already finished in repair and strengthening of concrete elements with FRPs and other advanced reinforcements.

2005(/5) – 2012(/3): Project Leader of the research program KE1331 (80296) entitled: ‘Mechanical behaviour of FRP confined concrete’ with a funding of 23616 Euros from Engineers and Public Works Contractors Research Fund.

2009(/10) – 2012(/9): Project Leader of the research program KE1900 (80001) entitled: ‘Repair and strengthening of Concrete Structural Members by Fiber Reinforced Polymer or/and Resin Injection’ with a funding of 13570 Euros from Engineers and Public Works Contractors Research Fund.

2011(/11) – 2014(/10): Project Leader of the research program KE 80867 entitled: ‘Retrofit of Concrete Structural Members’ with a funding of 22841 Euros from Engineers and Public Works Contractors Research Fund.

2014(/9) – present: Project Leader of the research program KE 81420 entitled: ‘Specialized Retrofit of Concrete Members and Structures’ with a funding of 20338 Euros from Engineers and Public Works Contractors Research Fund.

2017(/9) – 2018(/9): Project Leader of the research program MD-Interface pa171204 entitled: ‘Molecular Dynamics (MD) Simulation of the New-to-old Concrete Interface, in collaboration with the team of Professor Denvid Lau, City University of Hong Kong, that received computational resources in ARIS system, GRNET High Performance Computing Services.

<https://hpc.grnet.gr/scientific-results/publist/?key=QIN2019346&bib=http%3A%2F%2Fdoc.aris.grnet.gr%2Faris.bib>

2018(/9) – : Project Leader of the research program **“In- and out-of-plane analytical behavior of masonry-infilled RC frames with flexible joints”**, for FAR Poland.

2018(/11) – : Project Leader of the research program MD-Interface2 pa181102 entitled: ‘Molecular Dynamics (MD) Simulation of the effect of SRA on the New Concrete in Interfaces with Old Concrete’, in collaboration with the team of Professor Denvid Lau, City University of Hong Kong, that received computational resources in ARIS system, GRNET High Performance Computing Services.

2019(/2) – : Research collaboration with Slovenian National Building and Civil Engineering Institute Slovenia (ZAG) και Cracow University of Technology CUT, Poland in the field of **“In- and out-of-plane tests of masonry-infilled RC frames with flexible joints”**.

2019(/5) – : Leader of Users’ Group including 8 universities and 3 industrial partners within the approved project **““Infills and MASONry structures protected by deformable POLyurethanes in seismic areas (INMASPOL)” of the action Horizon 2020, Seismology and Earthquake Engineering Research Infrastructure Alliance for Europe – SERA –, H2020-EU.1.4.1.2. - Integrating and opening existing national and regional research infrastructures of European interest, INFRAIA-01-2016-2017 - Integrating Activities for Advanced Communities**. The experiments will be executed in IZIIS institute in Skopje. The group includes another 8 universities and institutes (ITU Turkey, Cracow UT Poland, University of Chieti Pescara Italy, Slovenian National Building and Civil Engineering Institute Slovenia, University of Nottingham UK, Università di Bologna Italy, University of Ljubljana Slovenia) and 3 industrial partners (Sika Poland, KEBE SA Greece, FAR Systems Poland).

<https://sera-ta.eucentre.it/index.php/sera-ta-project-37/>

Research interests

In the last 19 years he has conducted research in experimental, analytical and in-situ inspection projects. His research involves constitutive and empirical modelling of materials and concrete members, inelastic analyses of structures, as well as experiments on concrete members retrofitted by FRPs etc.

The research Interests involve (from his site <http://utopia.duth.gr/~trousak/>)

- Experimental investigation of the repair and strengthening of reinforced concrete elements with composite materials (FRPs), designed with old and modern codes
- Analytical investigation and design recommendations for the repair and strengthening of concrete elements with use of composite materials
- Plasticity modelling of FRP strengthened concrete elements
- 3D finite element analysis of FRP strengthened reinforced concrete elements and structures
- Assessment of capacity of existing RC structures with static or dynamic inelastic (time-history) analysis and investigation of FRP strengthening alternatives
- Pre-seismic control of structures. Calibration and improvement of RVS methodology through post-seismic inspections. Investigation of vulnerability parameters of structures through inspections to earthquake damaged structures.
- Experimental and analytical research on the use of composite fiber reinforcements (FR) in retrofit, combined with other composites (hybrid) or not (seismic strengthening through confinement, shear strengthening, flexural etc).
- Assessment of residual life of ageing infrastructure and of members under fatigue loads (bridge girders etc) or with corroded steel reinforcements.

Publications

(Scopus <http://www.scopus.com/authid/detail.url?authorId=12795640500>)

Google Scholar http://scholar.google.gr/citations?user=OKejd_wAAAAJ&hl=el&oi=sra

ResearchGate http://www.researchgate.net/profile/Theodoros_Rousakis/

<http://orcid.org/0000-0002-6384-1451>)

More than 825 citations from other publications (author's and coauthors' references not taken into account) are counted in Scopus. During the last 5 years there are more than 600 citations.

h-index scopus = 20.

h-index scopus (excluding citations from author and coauthors)=19 with 1st published paper in 2002 and PhD received in 2005.

That is $19/(2019-2002)=19/17=1.11$

More than 1520 citations in total, are counted in Google Scholar.

With (A) are signed the 'self-sufficient papers' (that is without the participation of the PhD thesis supervisor)

Journal papers (V)

1. Karabinis A.I, Rousakis T.C. (2002): Concrete Confined by FRP Material: A Plasticity Approach. Elsevier Engineering Structures Journal, 24, pp. 923-932. **(118 citations in Scopus, self-citations excluded)**
2. Rousakis T., Tepfers R. (2004): Behavior of concrete confined by high E-modulus carbon FRP sheets, subjected to monotonic and cyclic axial compressive load. Nordic Concrete Research Journal, Publication No. 31, (1), pp. 73-82. http://www.nordicconcrete.net/ikbViewer/page/fagmiljo/liste1/artikkel?p_o=10064&p_menu=30103&p_submenu=13246&p_document_id=42471
(A)(8 citations in Scopus, self-citations excluded)
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4. Iacovello F., and Lepov V., **Rousakis T.**, Samuel B.M.: **Guest Editors of the Proceedings** of the “1st International Conference on Integrity and Lifetime in Extreme Environment (ILEE-2019)” in *Procedia*, under preparation. (A), <5έτη

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54. Anagnostou E.I., Rousakis T.C. (2017): Seismic Retrofitting Of Damaged RC Columns With Composites And Novel Techniques. 25th International Conference on Composites/Nano Engineering (ICCE-25), July 16-22, 2017 Rome, Italy, editor David Hui.
55. Fanaradelli T., Rousakis T. (2017): Concrete Columns Under Repeated Axial Load Strengthened With Composites And Other Novel Techniques. 25th International Conference on Composites/Nano Engineering (ICCE-25), July 16-22, 2017 Rome, Italy, editor David Hui.
56. Rousakis T.C., Lisseli S.A. (2017): Reinforced Concrete structures with partial infill walls - Seismic Retrofit of Short Columns with Composite Rope or FRP Jacket Confinement. 25th International Conference on Composites/Nano Engineering (ICCE-25), July 16-22, 2017 Rome, Italy, editor David Hui.
57. Kwiecień A., Gams M, Viskovic A, Kisiel P, Korelc J., Rousakis T. (2017): Use of polymer flexible joint between RC frames and masonry infills for improved seismic performance. SMAR 2017 – Fourth Conference on Smart Monitoring, Assessment and Rehabilitation of Civil Structures, 13-15 September 2017, ETH, Zurich.

58. Thomoglou A., Rousakis T., Karabinis A. (2018): Numerical modeling of shear behavior of URM strengthened with FRCM or FRP subjected to seismic loading. 16th European Conference on Earthquake Engineering, 18-21 June 2018, Thessaloniki, Greece.
59. Thomoglou A., Rousakis T., Karabinis A., Mellios N. (2018): Experimental investigation and 3D finite element analysis of solid and hollow clay bricks. 26th International Conference on Composites/Nano Engineering (ICCE-26), 15 - 21 July, Paris, France, editor David Hui.
60. Rousakis T., Samprakou V. (2018): Assessment of deficient existing school building and strengthening with composite materials according to the Greek Retrofit Code. 26th International Conference on Composites/Nano Engineering (ICCE-26), 15 - 21 July, Paris, France, editor David Hui.
61. Rousakis T., Visviki E. (2018): Assessment of deficient three-storey school building in high seismic region and composite retrofit according to the Greek Retrofit Code. 26th International Conference on Composites/Nano Engineering (ICCE-26), 15 - 21 July, Paris, France, editor David Hui.
62. Anagnostou E., Rousakis T., Georgiadis N. (2018): Finite element analysis of deficient RC columns with square and rectangular section under pseudoseismic load and comparison with retrofit code predictions. 26th International Conference on Composites/Nano Engineering (ICCE-26), 15 - 21 July, Paris, France, editor David Hui.
63. Rousakis T., Georgiadis N., Anagnostou E. (2018): 3d Finite element pseudoseismic analysis of CFRP strengthened RC columns. 26th International Conference on Composites/Nano Engineering (ICCE-26), 15 - 21 July, Paris, France, editor David Hui.
64. Fanaradelli T., Rousakis T., Pavlou D. (2018): 3d Finite element analyses of axially loaded columns externally strengthened with transverse composite ropes. 26th International Conference on Composites/Nano Engineering (ICCE-26), 15 - 21 July, Paris, France, editor David Hui.
65. Akyildiz T., Kwiczen A., Rousakis T., Kramar M. (2018): Preliminary numerical analyses of masonry infill walls before shaking table testing. 26th International Conference on Composites/Nano Engineering (ICCE-26), 15 - 21 July, Paris, France, editor David Hui.
66. Rousakis T., Sapalidis A., Papadopoulos B. (2018): Fuzzy linear modeling of RC beams strengthened in shear with CFRP sheets. 26th International Conference on Composites/Nano Engineering (ICCE-26), 15 - 21 July, Paris, France, editor David Hui.

All accepted papers were presented orally as well (except for papers 22, 23, 24 that were presented as posters, paper 25 via internet-virtual and papers 41, 42, 44).

Papers in Greek Conferences and Workshops (VII)

1. Karabinis A.I., Rousakis T.C. (2000): Cylindrical Concrete Members Confined with Carbon Fibers Under Axial Load. 1st Hellenic Conference of Concrete Composite Materials, 9-10 November 2000, Xanthi, pp. 287-296 (in Greek).
2. Karabinis A.I., Rousakis T.C. (2000): Analytical Model for the Mechanical Behaviour of Concrete Confined by Composite Material Sheets. 1st Hellenic Conference of Concrete Composite Materials, 9-10 November 2000, Xanthi, pp. 308-316 (in Greek).
3. Karabinis A.I., Rousakis T.C. (2003): Concrete Members with Square Section Confined with Composite Sheets. 14th Concrete Conference (TCG), 15-17 October 2003, KOS, Greece, pp. 354-365 (in Greek).
4. Kioussis P.D., Rousakis T.C., Karabinis A.I. (2003): Application of Plasticity Theory in Concrete Members with Square Section Confined with Composite Materials. 14th Concrete Conference (TCG), 15-17 October 2003, KOS, Greece, pp. 380-391 (in Greek).
5. Karabinis A.I., Rousakis T.C. (2006): Experimental Investigation of the Plastic Behaviour of Uniformly Confined Concrete by FRP Jacket Subjected to Gradually Increasing Loading-

- Unloading. 15th Concrete Conference (TCG), 25-27 October 2006, , Alexandroupolis, Greece, Volume A, pp. 279-290 (in Greek).
6. Rousakis T.C., Karabinis A.I., Kiouisis P.D., Tepfers R. (2006): Analytical Modelling of Plastic Behaviour of Uniformly FRP Confined Concrete. 15th Concrete Conference (TCG), 25-27 October 2006, , Alexandroupolis, Greece, Volume A, pp. 347-358 (in Greek).
 7. Karabinis A.I., Rousakis T.C., Manolitsi G.E. (2006): Finite Element Modelling of the Behaviour of Reinforced Concrete Columns Confined with FRPs. 15th Concrete Conference (TCG), 25-27 October 2006, , Alexandroupolis, Greece, Volume A, pp. 340-351 (in Greek).
 8. Καραμπίνης Α.Ι., Μπαλτζοπούλου Α.Δ., Ρουσάκης Θ.Χ. (2006): The Earthquake of Lefkada 14 August 2003. Investigation of the seismic vulnerability of structures. 15th Concrete Conference (TCG), 25-27 October 2006, , Alexandroupolis, Greece, Volume A, pp. 330-339 (in Greek).
 9. Rousakis T.C., Karabinis A.I. (2008): Seismic Repair of RC Elements With FRPs, after Extensive Damage. 3rd Greek Conference in Earthquake Engineering and Technical Seismology, Athens, KA 2107, 6-7 November 2008.
 10. Rousakis T.C., Karabinis A.I. (2009): FRP Strengthening of Columns Against Bar's Buckling – Strength Prediction. 16^o Concrete Conference (TCG), 21-23 October 2009, Paphos, Cyprus (in Greek).
 11. Rousakis T., Kardala M. (2012): Antiseismic strengthening of reinforced concrete structures through column confinement with fiber ropes or/and FRPs. Proceedings of the workshop of the Hellenic Society of Earthquake Engineering (ETAM) «The Earthquake Engineering through the scientific perspective of young researchers and engineers», 7 December 2012, Thessaloniki.
 12. Rousakis T., Moumtzis I., Stylianou M. (2012): Strengthening of concrete structures with fiber ropes or FRPs – comparison of their capacity with structures designed with modern codes. Proceedings of the workshop of the Hellenic Society of Earthquake Engineering (ETAM) «The Earthquake Engineering through the scientific perspective of young researchers and engineers», 7 December 2012, Thessaloniki.
 13. Triantafyllou G.G, Rousakis T.C., Karabinis A.I (2015): Reinforced Concrete members attacked by Reinforcement Corrosion beyond concrete crack initiation. Scientific Workshop on «Latest Advances in Civil Engineering Research». Democritus University of Thrace, Civil Engineering Department, Xanthi, 15th of May 2015.
 14. Charalambidi B.G., Rousakis T.C., Karabinis A.I. (2015): Fatigue Behavior of RC Beams Strengthened in Bending and Shear through FRPs. Scientific Workshop on «Latest Advances in Civil Engineering Research». Democritus University of Thrace, Civil Engineering Department, Xanthi, 15th of May 2015.
 15. Baltzopoulou A.D, Eleftheriadou A.K., Rousakis T.C., Karabinis A.I. (2016): Assessment of the Structural Damages of Buildings After Lefkada Earthquakes (2003 & 2015). Safe Evros 2016, new technologies and civil protection, 22-25 June 2016, Alexandroupolis, Greece (in Greek).
 16. Eleftheriadou A.K., Baltzopoulou A.D, Rousakis T.C., Karabinis A.I. (2016): Calibration of Post-seismic Damage Of Buildings After Andravida Earthquake (8/6/2008) With Two Damage Scales.. Safe Evros 2016, new technologies and civil protection, 22-25 June 2016, Alexandroupolis, Greece (in Greek).
 17. Rousakis T. (2016): RC Columns Confined with Composite Ropes and FRP Sheets – Seismic Damage Redistribution Capacity. 17th Greek Concrete Conference (TCG), 10-12 November 2016, Thessaloniki, Greece (in Greek).
 18. Nikolaidis D., Rousakis T. (2016): Structural Assessment of Existing Reinforced Concrete Building with the Structural Degradation Coefficient Method (r_{eff}). 17th Greek Concrete Conference (TCG), 10-12 November 2016, Thessaloniki, Greece (in Greek).

19. Anagnostou E., Rousakis T., Karabinis A. (2016): Seismic Resistant Strengthening of Columns with Transverse Composite Material Jackets. 17th Greek Concrete Conference (TCG), 10-12 November 2016, Thessaloniki, Greece (in Greek).
20. Fanaradelli M., Rousakis T., Karabinis A. (2016): Reinforced Concrete Columns of Square and Rectangular Section Confined with FRPs-Prediction of Strength and Ultimate Strain. 17th Greek Concrete Conference (TCG), 10-12 November 2016, Thessaloniki, Greece (in Greek).
21. Triantafyllou G., Rousakis T., Karabinis A. (2016): Behaviour of Reinforced Concrete Beams With Corroded Steel Reinforcement Under Serviceability Load. 17th Greek Concrete Conference (TCG), 10-12 November 2016, Thessaloniki, Greece (in Greek).
22. Triantafyllou G., Rousakis T., Karabinis A. (2016): Analytical Modeling of Corroded Beams Strengthened in Flexure with Composite Materials. 17th Greek Concrete Conference (TCG), 10-12 November 2016, Thessaloniki, Greece (in Greek).
23. Charalambidi B., Rousakis T., Karabinis A. (2016): Analytical Modeling of the Fatigue Behaviour of Reinforced Concrete Beams Strengthened with Composite Materials. 17th Greek Concrete Conference (TCG), 10-12 November 2016, Thessaloniki, Greece (in Greek).
24. Charalambidi B., Rousakis T., Karabinis A. (2016): Experimental Investigation of the Fatigue Behaviour of Reinforced Concrete Beams Strengthened in Flexure with Composite Materials. 17th Greek Concrete Conference (TCG), 10-12 November 2016, Thessaloniki, Greece (in Greek).
25. Thomoglou A., Rousakis T., Karabinis A. (2016): Strengthening of Masonry Walls with External FRP or TRM reinforcement. 17th Greek Concrete Conference (TCG), 10-12 November 2016, Thessaloniki, Greece (in Greek).
26. Tsakiris S., Rousakis T., Karabinis A. (2016): Reinforced Concrete Columns of Large Scale With Inadequate Lap Splices of Longitudinal Reinforcements Under Pseudoseismic Loading. 17th Greek Concrete Conference (TCG), 10-12 November 2016, Thessaloniki, Greece (in Greek).
27. Chalioris C., Kitinou V., Rousakis T. (2016): Investigation of Structural System and Retrofit Proposal of Educational Department Buildings in Alexandroupolis. 17th Greek Concrete Conference (TCG), 10-12 November 2016, Thessaloniki, Greece (in Greek).
28. Rousakis T. (2018): Seismic Resilience of Columns Strengthened With Innovative Hybrid Techniques. 18th Concrete Conference, Athens, March 29-31, 2018 (in Greek).
29. Triantafyllou G., Rousakis T., Karabinis A. (2018): Experimental investigation of corroded RC beams patch repaired and strengthened with CFRP. 18th Concrete Conference, Athens, March 29-31, 2018 (in Greek).
30. Triantafyllou G., Rousakis T., Karabinis A. (2018): Finite Element Analysis of the flexural behavior of corroded RC beams patch repaired and strengthened with FRP. 18th Concrete Conference, Athens, March 29-31, 2018 (in Greek).
31. Thomoglou A., Rousakis T., Karabinis A. (2018): Three-dimensional Finite Element Analysis of In-plane Shear Behavior of Masonry Strengthened with TRM/FRCM. 18th Concrete Conference, Athens, March 29-31, 2018 (in Greek).
32. Fanaradelli T., Rousakis T. (2018): Finite element modeling of reinforced concrete columns of square section under axial load confined with external elastic strengthening reinforcement. 18th Concrete Conference, Athens, March 29-31, 2018 (in Greek).

All papers were accepted for oral presentations as well (except for papers 12 and 32 that were presented as posters).

Master Thesis (VIII)

Rousakis T.C. (2000): Concrete elements confined by composite materials, under monotonic axial compression. Master Thesis, D.U.Th., Civil Engineering Department, Xanthi, Greece (in Greek).

Research reports (IX)

1. Rousakis T. (2001): Experimental investigation of concrete cylinders confined by carbon FRP sheets, under monotonic and cyclic axial compressive load. Research Report, Chalmers University of Technology, Göteborg, Sweden (in English, 84 citations).
2. Rousakis T. (2011): Mechanical behavior of concrete confined with composite materials. Research report KE1331, DUTH, Civil Engineering Department, Reinforced Concrete Lab, Xanthi, Greece (in Greek).
3. Rousakis T. (2012): Repair and Strengthening of Concrete Structural Members with FRPs or/and Injection Resins. Research report KE1900, DUTH, Civil Engineering Department, Reinforced Concrete Lab, Xanthi, Greece (in Greek)
4. Rousakis T. (2014): Retrofit of Concrete Elements. Research report KE80867, DUTH, Civil Engineering Department, Reinforced Concrete Lab, Xanthi, Greece (in Greek).

PhD Thesis (X)

Rousakis T.C. (2005): Mechanical behaviour of concrete confined by composite materials. PhD Thesis, D.U.Th., Civil Engineering Department, Xanthi, Greece (in Greek, 16 citations).

His Doctoral Thesis was requested by the Science and Engineering Library of the University of Sherbrooke (Quebec) Civil Engineering Department,

by the Institute for Infrastructure and Environment, School of Engineering and Electronics, University of Edinburgh, United Kingdom,

from Barr Smith Library - The University of Adelaide, Australia and

from Civil Engineering Institute, Dalian University of Technology, China.

Lecture notes (XI)

Lecture notes - handouts and exercises in postgraduate course “Research Methodology in Reinforced Concrete”.

Lecture notes - handouts and exercises in undergraduate courses “Reinforced Concrete 1c”, “Reinforced and Prestressed Concrete Bridges”, “Assessment and Retrofit of Structures”, “Masonry Structures”.

Member of the editorial board of SCOPUS indexed journals (XIII)

Member of the Editorial Board of the international journal Composites Part B: Engineering, Elsevier (invited). CiteScore 5.41, Impact factor 4.92
<http://www.journals.elsevier.com/composites-part-b-engineering>

Member of the Editorial Advisory Board of Structural Concrete, Journal of the *fib*, Wiley (invited)
https://onlinelibrary.wiley.com/page/journal/17517648/homepage/2084_edbd.html

Member of the Advisory Board of Nanotechnology Reviews Journal, De Gruyter (invited)
<https://www.degruyter.com/view/j/ntrev>

Member of the Editorial Board of the World Journal of Engineering (invited). Published quarterly • ISSN 1708-5284, indexed in Scopus. <http://www.multi-science.co.uk/wje.htm>

Member of the Editorial Board of the journal MDPI Fibers (invited). • ISSN 2079-6439; CODEN: FIBECU, indexed in Scopus. <https://www.mdpi.com/journal/fibers/editors>

Member of the Reviewers' Board of the Journal of Frontiers in Materials, in section of Structural Materials and in Built Environment, in Earthquake Engineering (invited).
<http://journal.frontiersin.org/journal/materials/section/structural-materials#editorial-board>

Guest Editor of the Open Special Issue on **Structural Modelling at the Micro-, Meso-, and Nanoscales, of the Open Journal of Modelling and Simulation in Engineering, Hindawi.**
<http://www.hindawi.com/journals/mse/osi/>

Reviewer of journals (XIV)

Reviewer of the following 44 journals (invited):

1. **Journal of Composites Part B: Engineering, Elsevier**
2. **Materials and Structures Journal, RILEM**
3. **Journal of Composites for Construction, ASCE**
4. **Journal of Materials in Civil Engineering, ASCE**
5. **Journal of Engineering Mechanics, ASCE**
6. **Journal of Structural Engineering, ASCE**
7. Journal of Bridge Engineering, ASCE
8. Materials Journal, ACI
9. Engineering Structures Journal, Elsevier
10. Construction and Building Materials, Elsevier
11. Composite Structures, Elsevier
12. Journal of Environmental Management, Elsevier
13. Journal of Advances in Engineering Software, Elsevier
14. International Journal of Fatigue, Elsevier
15. Journal of Thin-Walled Structures, Elsevier
16. Journal of Materials and Design, Elsevier
17. Structures Journal, Elsevier
18. Colloids and Surfaces A, Elsevier
19. Journal of Case Studies in Construction Materials, Elsevier
20. Polymers — Open Access Polymer Science Journal, MDPI
21. Fibers — Open Access Polymer Science Journal, MDPI
22. Materials — Open Access Polymer Science Journal, MDPI
23. World Journal of Engineering, Emerald
24. Structural Concrete, Journal of the *fib*, Ernst and John, a Wiley Brand
25. SPE Polymer Composites Journal, Wiley
26. Structural Engineering International, IABSE
27. Journal of Reinforced Plastics and Composites, SAGE
28. Journal of Advances in Structural Engineering, SAGE
29. Journal of Advances in Mechanical Engineering, SAGE
30. Computers and Concrete, An international Journal, Techno Press
31. Steel and Composite Structures, An international Journal, Techno Press
32. Structural Engineering and Mechanics, *An International Journal*, Techno Press
33. Advances in Concrete Construction, *An International Journal*, Techno Press
34. Frontiers in Materials Journal
35. Proceedings of Institution of Civil Engineers (ICE) Journal - Structures and Buildings, Thomas Telford

36. Scientia Iranica Journal
37. Journal of Structures, Hindawi (open access journal)
38. The Open Construction & Building Technology Journal, Bentham OPEN
39. Structure and Infrastructure Engineering, Taylor and Francis
40. Journal of Zhejiang University-Science A. Applied Physics and Engineering, Springer
41. Neural Computing and Applications, Springer
42. HKIE Transactions Journal, The Hong Kong Institution of Engineers, Taylor and Francis
43. Journal of Testing and Evaluation, ASTM
44. Advances in Civil Engineering Materials, ASTM

Certificate of Outstanding Reviewer awarded by

- **Engineering Structures Journal, Elsevier (2014)**
- **Journal of Composites Part B: Engineering, Elsevier (2015)**
- **Journal of Construction and Building Materials (2015)**
- Journal of Materials and Design, Elsevier (2015)

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Inclusion in databases

He is included in two biography databases – publications:

Biography in the publications of Who's Who in the World since the 2009 - Edition of Who's Who in the World, Marquis.

https://cgi.marquiswhoswho.com/OnDemand/Default.aspx?last_name=Rousakis&first_name=Theodoros

Biography in the publications of the International Biographical Center (IBC) Cambridge since 2009.

Participation in Scientific Committees of Conferences (XV)

- 2012 (3-7/12): Member of the Scientific Committee of international virtual conference «The 1st Virtual International Conference on Advanced Research in Scientific Areas (ARSA-2012)». <http://www.arsa-conf.com/archive/?vid=1&aid=1&kid=60101>
- 2013 (8-12/4): Invited member of the Scientific Committee and committee of reviewers of international virtual conference «The 1st Global Virtual Conference 2013 (GV-CONF 2013)», April 8. - 12., 2013. <http://www.gv-conference.com/archive/?vid=1&aid=1&kid=30101>
- 2013 (8-12/4): Member of the Scientific Committee and committee of reviewers of international virtual conference «ScieConf, Scientific Conference 2013», June 10-14, 2013. <http://www.scieconf.com/archive/?vid=1&aid=1&kid=90101>
- 2013 (20-22/11): **Invited member of the Scientific Committee of Technical Program of “2nd Global Conference on Materials Science and Engineering (CMSE 2013)”**, Hubei University of Science and Technology, Xianning(Hubei, China), Nov. 20-22, 2013. <http://www.cmseconf.org/Committee.html>
- 2013 (18-22/11): Invited member of Reviewer Committee in International Virtual Conference: “1st Research Conference In Technical Disciplines 2013”. <http://www.rcitd.com/about-conference/>
- 2014 (13-19/7): Technical Co-chair and member of the Editorial Advisory Board of The Twenty-second Annual International Conference on COMPOSITES/NANO ENGINEERING (ICCE-22)**, 13 - 19 July, Malta. Chairing of sessions.
- 2014 (20-23/10): **Invited member of the Scientific Committee of Technical Program of “3rd Global Conference on Materials Science and Engineering (CMSE 2014)”**, Shanghai, China, Oct. 20-23, 2014. <http://www.cmseconf.org/2014/Committee.html>
- 2015 (/3): **Invited member of the Committee of Reviewers of “The International Conference on Materials Science (ICMS2015)”**, (Shanghai China), March 29-31, 2015. <http://www.icmsconf.org/>
- 2015 (/5): **Member of the Scientific Committee of the Scientific Workshop on «Latest Advances in Civil Engineering Research»**. Democritus University of Thrace, Civil Engineering Department, Xanthi, 15th of May 2015.
- 2015 (12-18/7): Technical Co-chair and member of the Editorial Advisory Board of The Twenty-third Annual International Conference on COMPOSITES/NANO ENGINEERING (ICCE-23)**, 12 - 18 July, Chengdu, China. Chairing of sessions. <http://www.icce-nano.org/>
- 2015 (3-6/8): **Invited member of the Scientific Committee of Technical Program of “4th Global Conference on Materials Science and Engineering (CMSE 2015)”**, Macau, China, Aug. 3-6, 2015. <http://www.cmseconf.org/Committee.html>
- 2016 (17-23/7): Technical Co-chair of The Twenty-third Annual International Conference on COMPOSITES/NANO ENGINEERING (ICCE-24)**, 17 - 23 July, Haikou, Hainan, China. <http://www.icce-nano.org/>
- 2016 (3-6/8): **Invited member of the Scientific Committee of Technical Program of “5th Global Conference on Materials Science and Engineering (CMSE 2016)”**, Taiwan, November 8-11, 2016. <http://www.cmseconf.org/Committee.html>

- 2016 (10-12/11): **Invited member of the Scientific Committee of “17th Greek Concrete Conference”**, Thessaloniki, November 10-12, 2016.
- ...
- 2017 (10-11/7): **Invited member of the International Scientific Committee of the International Symposium for Emerging Researcher in Composites for Infrastructure (ISERCI 2017)**, Wollongong, Australia, 10-11 July 2017.
- 2016 (17-23/7): Technical Co-chair and member of the Editorial Advisory Board of The Twenty-third Annual International Conference on COMPOSITES/NANO ENGINEERING (ICCE-24)**, 17 - 23 July, Haikou, Hainan, China. <http://www.icce-nano.org/>
- 2016 (3-6/8): **Invited member of the Technical Program Committee of the “5th Global Conference on Materials Science and Engineering (CMSE 2016)”**, Taiwan, November 8-11, 2016.
<http://www.cmseconf.org/Committee.html>
- 2017 (21-23/4): **Invited member of the Scientific Committee of the “2017 International Conference on Materials Science and Engineering Application (ICMSEA2017)”**, Nanjing, China, 21-23 April 2017.
- 2017 (10-11/7): **Invited member of the International Scientific Committee of the “International Symposium for Emerging Researcher in Composites for Infrastructure (ISERCI 2017)”**, Wollongong, Australia, 10-11 July 2017.
- 2017 (16-22/7): Technical Co-chair and member of the Editorial Advisory Board of The Twenty-fifth Annual International Conference on COMPOSITES/NANO ENGINEERING (ICCE-25)**, 16 - 22 July, Rome, Italy. <http://www.icce-nano.org/>. Co-chair of the Infrastructure Composites Symposium.
- 2017 (25-27/8): **Invited member of the Technical Committee of the “2017 International Conference on Material Engineering and Advanced Manufacturing Technology”**, August 25-27, 2017 Busan, Korea.
- 2017 (24-27/10): **Invited member of the Technical Program Committee of the “CMSE 2017, The 6th Global Conference on Materials Science and Engineering”**, October 24th - 27th, 2017, Beijing, China.
- 2017 (15-17/11): **Invited member of the International Technical Committee of the “2017 2nd International Conference on Carbon Materials and Material Sciences (ICMCM 2017)”**, November 15-17, 2017 Melbourne, Australia.
- 2018 (29/3-31/3): **Invited member of the Scientific Committee of “18th Concrete Conference”**, Athens, March 29-31, 2018.
- 2018 (15-21/7): Scientific Committee Member of The Twenty-sixth Annual International Conference on COMPOSITES/NANO ENGINEERING (ICCE-26)**, 15 - 21 July, Paris, France. <http://www.icce-nano.org/>.
- 2019 (18-22/3): Invited member of the Scientific Committee of RILEM Spring Convention 2019 and International Conference on Sustainable Materials, Systems and Structures SMSS2019, CHALLENGES IN DESIGN AND MANAGEMENT OF STRUCTURES**, Rovinj, Croatia, 18 - 22 March 2019.

- 2019 (17-20/4): **Invited member of the Scientific Committee** of the “*International Civil Engineering and Architecture Conference (ICEARC’19)*”, April 17-20, 2019, Trabzon, Turkey. <http://www.icearc2019.com/Home/Committees>
- 2019 (26-28/4): **Invited member of the Committee of Technical Program** of the “2019 International Conference on Material Engineering and Advanced Manufacturing Technology”, April 26-28, 2019 Shanghai, China. <http://www.meamt.org/>
- 2019 (16-17/5): **Invited member of the Scientific Committee of The 13th International Conference “Modern Building Materials, Structures and Techniques” (MBMST)**, 16 - 17 May, Vilnius, Lithuania. <https://www.conference-service.com/MBMST-2019/txt3.html>
- 2019 (14-17/10): **Invited member of the International Committee Member of The 1st International Conference on Integrity and Lifetime in Extreme Environment (ILEE-2019)**, 14 - 17 October, Yakutsk, Russia. <http://ilee2019.ru/>

Invited Scientific Lectures (XVI)

Eurocode seminars:

Invited during 2011 by the Organization for Antiseismic Planning and Protection (OASP, together with Technical Chamber of Greece and SPME) to prepare and introduce to the professional engineers the new requirements of Eurocodes 0 & 1 or 2 & 8 in four different seminars in Xanthi (29/3/2011), Alexandroupolis (30/3/2011), Tripoli (9/4/2011) and Kozani (18/6/2011).

Invited during 2012 and 2013 by the Technical Chamber of Greece – Section of Thrace and by the Technical Chamber of Greece – Section of Central and Western Thessaly to prepare and introduce to the professional engineers: a) the new requirements of Eurocode 8 part 3 for the Design of the Retrofit of Structures with Composite Materials and the Quality Control, b) the Pre-seismic and Post-seismic Control (Inspection) of Structures through Rapid Visual Screening in the Regions of Lefkada, Ilia, Eastern Macedonia and Thrace in a seminar in Xanthi (7/12/2012) and in Larissa (22/2/2013).

2013 (4/12): Invited presentation on: “Confinement with FRPs” belonging to entity of “Presentations on priority areas: State-of-the-art and challenges - Strengthening of reinforced concrete structures”, during Core Group Meeting of Action COST TU 1207 “Next Generation Design Guidelines for Composites in Construction”, University of Sheffield Sheffield, United Kingdom.

2014 (20/2): Seminar within the framework of granted Short Time Scientific Mission, STSM of European COST (European Cooperation in Science and Technology) Action TU1207: «Next Generation Design Guidelines for Composites in Construction», in La Sapienza University, Rome, on the following topics:

- Introduction to COST Action TU1207 “Next Generation Design Guidelines for Composites in Construction” and to Short Time Scientific Missions (STSM).
- “Experimental and analytical database in FRP confined concrete members” within the framework of the COST Action TU 1207 STSM.
- “Drucker–Prager-type plasticity modelling of FRP confined concrete mechanical behaviour and FEA applications”.

2014 (13/3): Invited presentation on: “New Composite Materials and Techniques in Strengthening of Reinforced Concrete Members -Design issues” in session of “New Composite-based Materials, Systems and Strengthening Techniques”, during TU 1207 COST Action Meeting “Next Generation Design Guidelines for Composites in Construction”, in Lyon, France.

2014 (6/6): Invited speaker in module Frontier 111: Innovation Infrastructure Accelerating Advanced Material Discovery, presenting “New Composite Materials and Techniques in Strengthening of Concrete Structures - COST Action TU1207: Next Generation Design Guidelines for Composites in Construction” in conference: BIT’s 3rd Annual World Congress of Advanced Materials (WCAM-2014), 6-9 / 6 / 2014, Chongqing, China. <http://www.bitcongress.com/wcam2014/Program-1.asp>

2015 (10/1): Invited seminar organized by the Technical Chamber of Greece – Section of Central and Western Thessaly, for the professional engineers. The following topics have been presented: a) Conventional Retrofit Techniques and Examples, b) Strengthening with Advanced Composite Materials (FRPs) and Examples, c) Quality Control of Strengthening Applications.

2015 (21/5): Invited presentation on: “Analytical modeling of externally strengthened RC columns with degrading stress-strain behaviour” in session of “New Composite-based Materials, Systems and Strengthening Techniques”, during TU1207 COST Action Meeting “Next Generation Design Guidelines for Composites in Construction”, in Lecce, Italy. Chairing of session: Strengthening with Composites: Reinforced Concrete Structures.

2015 (8/10): Invited presentation on: “Utilization of reverse MCFT analyses towards advanced design model for RC beams strengthened in shear with FRPs” in session of “Shear Design of New and Strengthened Elements with FRP: design philosophies”, during TU1207 COST Action Meeting “Next Generation Design Guidelines for Composites in Construction”, in Barcelona, Spain. Chairing of session: Composites in Construction: Innovative Systems and Solutions.

2016 (4/4): Invited presentation on: “Fatigue Behavior and Design of Reinforced Concrete Beams Strengthened in Flexure with FRP” in session of “Externally Bonded Reinforcement/Innovative Solutions”, during TU1207 COST Action Meeting “Next Generation Design Guidelines for Composites in Construction”, in Lodz, Poland. Chairing of the session.

2016 (2/11): Invited presentation on: “Corroded RC Beams Patch Repaired and Strengthened with CFRP Laminates” in session of “EBR strengthening”, during TU1207 COST Action Meeting “Next Generation Design Guidelines for Composites in Construction”, in Prague, Czech. Chairing the session.

2017 (1/3): Invited presentation on: “Timely repair and strengthening of structures with advanced composites. Techniques to avoid their disproportionate and premature devaluation”, in Academy of East Macedonia and Thrace Prefecture.

2017 (3/4): Invited presentation on: “Noncircular Reinforced Concrete Columns Strengthened With Hybrid Elastic Materials” in session of “Column Strengthening”, during TU1207 COST Action Meeting “Next Generation Design Guidelines for Composites in Construction”, in Budapest, Hungary. Chairing the session.

2018 (25-26/10): Invited presentation of the topics: “Seismic FRP strengthening of rectangular RC columns for increased displacement ductility” and “FRP Strengthening of rectangular RC columns for increased static axial load” in the sessions of the 36th Meeting of the *fib* TG5.1 FRP reinforcement for concrete structures”, Barcelona, 25-26/10/2018.

Participation in committees, meetings, conferences and seminars (XVII)

Member of *fib* Task Group 5.1 (former 9.3) «FRP (Fibre Reinforced Polymer) reinforcement for concrete structures» in Externally Applied Reinforcement (EAR, former EBR) since 2000. He has participated in 12 meetings (6th, 9th, 11th, 18th meeting and invited in 23rd, 24th, 27th, 28th, 29th, 30th, 32nd, 33rd, 34th meetings).

Research visit to Sapienza University of Rome to collaborate with Professor Nicola Nistico (20&21/9/2010).

Participation after invitation in 7 meetings of the Management Committee and of the Core Group of European Action COST TU 1207 “Next Generation Design Guidelines for Composites in Construction” since 2013.

Participation in 5 Greek Conferences since 2000, 1 workshop of Hellenic Society of Earthquake Engineering and other workshops and in 12 international conferences on FRP strengthening and seismic design of RC structures with oral presentations.

Research visit to La Sapienza University of Rome to collaborate with Professor Nicola Nistico from 17-21/2/2014, within the framework Short Time Scientific Mission, STSM), of the European COST (European Cooperation in Science and Technology) Action TU1207: Next Generation Design Guidelines for Composites in Construction».

Research visit to City University of Hong Kong to collaborate with Professor Yufei Wu from 13-25/4 2015 on concrete confinement and FRP applications in civil/structural engineering.

Organization of “Preconference Scientific Visit to Xanthi, DUTH”, 12-14/7/2017 within the framework of “The Twenty-fifth Annual International Conference on COMPOSITES/NANO ENGINEERING (ICCE-25) with participation of 2 guest colleagues from Iran and Hong Kong giving seminar 13th of July.

Participation as Technical Co-chair in “The Twenty-fifth Annual International Conference on COMPOSITES/NANO ENGINEERING (ICCE-25)”, 17 - 22 July 2017, Rome, Italy with 11 papers. Co-chair of the Symposium “Infrastructure Composites” within ICCE-25.

Participation in the “18th Concrete Conference”, Athens, March 29-31, 2018.

Invited participation in the 3rd DRMKC Disaster Risk Management Knowledge Centre, Annual Seminar, Sessions on Education and on Resilience, 26-27 April 2018 - Sofia, Bulgaria, Bulgarian Presidency Events.

Participation in The Twenty-sixth Annual International Conference on COMPOSITES/NANO ENGINEERING (ICCE-26), 15 - 21 July 2018, Paris, France. <http://www.icce-nano.org/>

Research collaboration with Professor David Hui during his visit in Xanthi 4-10/7/2018, within the framework of Erasmus+ International Credit Staff Mobility for Teaching – STA (Responsible hastener for the Civil Engineering Department, Assist. Professor T. Rousakis) https://www.facebook.com/pg/erasmus.duth/videos/?ref=page_internal

Invited participation in the 36th Meeting of the Scientific Committee of *fib* TG5.1 FRP reinforcement for concrete structures” in Barcelona, 25-26/10/2018 with two presentations.

Invited research visit in the Slovenian National Building and Civil Engineering Institute (ZAG), for research collaboration with Dr Miha Kramar, Prof. Legat, within the framework of specimen testing, 18 - 22/2/2019.

Approved mobility for Training and Research collaboration to the Institute of Earthquake Engineering and Engineering Seismology – Skopje, University Ss. Cyril and Methodius, after invitation, to be realized up to September 2019.

Participation in scientific- technical organizations (XVIII)

Member of the Technical Chamber of Greece, of the Association of Greek Civil Engineers, of the American Concrete Institute ACI, of the Hellenic Society of Earthquake Engineering ETAM, of the International Association for Bridge and Structural Engineering IABSE, of the International Institute for FRP in Construction, IIFC and member of the *fib*, Fédération internationale du béton.

Member of the Task Group 5.1 (formerly Task Group 9.3) of *fib* «FRP reinforcement for concrete structures» since 2015

Invited member of the Task Group 8.1 of *fib* «Model technical specifications for repairs and interventions» since 2019

Awards – Scholarships (XIX)

Scholarship from the Greek State Scholarships Foundation during first year in Civil Engineering Department, Democritus University of Thrace (rank 5/180 in my class).

Scholarship during the Postgraduate Program studies in Civil Engineering Department , Democritus University of Thrace entitled: ‘Advanced Materials and Novel Technologies in Design of Reinforced Concrete Structures’.

Awarded grant within the framework of European Action TUD COST (European Cooperation in Science and Technology) Action TU1207: «Next Generation Design Guidelines for Composites in Construction» for a Short Term Scientific Mission. The Mission concerns research visit to University of Rome La Sapienza to collaborate with Professor Nicola Nistico (17/2/2014 - 21/2/2014).